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88th
YEAR



The firm of P. B. Mingle Co. has been engaged in the seed business in the same building, No. 103 Market Street and No. 4 North Front Street, uninterruptedly, since 1837, and is well known among its patrons as headquarters for Clover, Grass and Vegetable Seeds; Bulbs, Roots and Plants; Poultry, Farm and Garden Supplies, being one of the largest handlers in this State.

Strict personal application to the details of so large a business has earned them a valuable reputation as thoroughly reliable seedsmen, whose representations as to the quality of the goods they offer can implicitly be relied upon.

## General Directions to Customers

## The attention of our Customers is respectfully called to the following directions, which will if followed, be an aid to purchasers as well as ourselves.

## ORDER EARLY

We aim to execute all orders as soon as received, but during the rush season in April and May, delays are unavoidable, which, however, can be largely overcome by our patrons anticipating their wants and ordering and taking delivery of their requirements early.

## USE THE ORDER SHEET

We place an order sheet in each catalogue. Please use same in ordering. It will aid us considerably in getting up your orders.

Please remember to write on each order your Name, PostOffice, County and State, also give number of street or P. O. Box as distinctly as possible; also, the NEAREST Express OFFICE, or, if on a stage route, send us special directions, giving us the name of the Express Company delivering goods.

## TERMS OF SALE

Cash With Order.-Please send money with the order sufficient to cover the whole bill.

## REMITTANCE

Should be made by Post-office Money Order, Drafts on Philadelphia or New York Banks, or Express Money Orders. We disclaim all responsibility when remittances are not made as above directed. Where it is not possible to obtain these the letter should be registered. Postage stamps will be found a convenient method of remitting for small amounts, and can be used by us to advantage. Coin should not be sent by mail.

## PERSONAL GHECKS

From unknown patrons will be cashed before order is executed.

## PROMPT ATTENTION

Anticipating the wishes of our customers, we give orders our prompt attention on the day they are received, and if for any reason, delay is unavoidable, we send prompt notice.

## SHIPPING INSTRUCTIONS

Always state by what method you want goods forwarded, otherwise we will ship according to our best judgment.

## PARCEL POST

Please include parcel post charges, if goods are desired shipped by this method, where remittance accompanies the order. (Unless your order calls for goods that we agree to pay charges on.) Peas, Corn and Beans add 8 cents per pint. 10 cents per quart, to cover postage.

We pay postage on 5 c . and 10 c . pkts., ounces and $1 / 4 \mathrm{lbs}$. of garden and flower seeds. Packages of 50 lbs ., and under can be sent by parcel post. Postage in first parcel post zone ( 50 miles), is 5 c. per lb. , and 1c. extra for each additional pound. In second postal zone ( 100 miles), 5 c . per lb., and 2 c . extra for each additional pound. When, owing to bulk or weight, seeds cannot be sent by mail, we deliver free to express or freight stations in Philadelphia, the purchaser paying all other transportation charges.

## C. O. D. SHIPMENTS

Goods can be sent C. O. D. (with the exception of perishable items). No C. O. D. shipments for any kind of goods can be made by express or parcel post unless a partial remittance of 25 per cent. of their value accompanies the order.

## SPECIAL NOTICE

Market Gardeners, Farmers' Clubs and Institutions wanting to purchase seeds in unusually large quantities should write for special prices. We have made prices very low in this catalogue, yet when a number of bushels or pounds are wanted we can frequently supply at a lower price than by the single pound or bushel. In writing give us a list of quantities and varieties required and we will return list promptly with our lowest price for the lot.
Always remember that we can save you money, no matter where you live.

## NON-WARRANTY OF SEEDS

It is a well-known fact that unfavorable weather (cold and wet, or hot and dry) has an unfavorable bearing on the germination of seeds, causing partial or complete failure of the crop; or the seeds may be, and frequently are, destroyed by insects of various kinds; therefore, while we exercise the greatest care to have all seeds pure, reliable and true to name, our seeds are sold without any warranty, expressed or implied, and without any responsibility on our part as to result of crop. If the purchaser does not agree to these terms the seeds are at once to be returned to us.

## CORRESPONDENCE

Write us about any seed you would like to know of and your letter will be answered the same day it is received. If you wish to know exactly what the freight or express would be on any article to your station, write us and we will tell you.

Space in this catalogue will not permit description of every article we sell, therefore, if there be anything you wish in our line write us for prices, if we don't have it we will get it and if we can't get it, it is not made.

## REFERENCE TABLES

Handy reference calendar and useful tables for the Farmer, Home Gardener or Florist, which may help to solve quickly all problems in the sowing or planting of seeds or plants.

| FEBRUARY | MARCH | APRIL | MAY | JUNE | JULY | AUGUST | SEPTEMEER |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sow In Hotbed | Sow in Hotbed | Sow in Hotbed | In Open | In Open | $n$ Open Ground | In Open Ground | In Open Ground |
| Broccoli | Early Beets | Cuc | Artichoke | Beans, |  | Beans, Bush | Cabbage for |
| Early Cabbage | Brussels | Eggpl Melon | Asparagus <br> Beans. Bush | all other sorts | Be | Tuberous Cher- | coldframes |
| Forclng Carrot Early Celery | Sprouts Early Cabbage Forcing Carrot | Pepper Tomato | Running Beets | Broccoli | Carrot |  | Cauliflower for coldframes |
| Eggplant |  |  | Brussels | Sprouts | Sweet Corn | Cucumbe | Tuberous Cher- |
| Early Lettuce Parsley | Cauliflower | In Open Ground Asparagus | Celery A Carrot Late Cabbage Corn Salad Endlve Vil |  |  |  |  |
| Pepper | Eggplant Asparagus    <br> Kohlrabl English Beans Cauliflower Carrot Cauliflower Cress |  |  |  |  |  |  |
| Radlsh |  | Beets <br> Brussels <br> Sprouts <br> Early Cabbage <br> Carrot | CelerySweetCress | Cauliflower <br> Sweet Corn | Cu | Welsh Oni | Siberlan Kale |
| Tomato | Parsley Pepper |  |  | Cress | E | W | Siberlan Kale |
|  | Radish |  | Cucumbe Kohlrabl | ndiv | Kale | Splnac | Mustard WInter Radl |
| Try the | Tomato In Open Ground | Caulif | Lee | hlrabl | Kohlrabi | urnip | Splnach |
| Crimson Globe | Beans, B. | C | Lettuc | ttuce | tuc | Rutabaga | ip |
| Beet |  |  |  | Okr |  |  |  |
|  | Ca | O | Parsley | Peas |  |  |  |
|  |  |  |  |  |  |  |  |
| is |  |  | tatoe | Radish |  | r | ing late |
|  | Potatoe | Potatoe | Rals |  |  | 2 Jun | nd July, |
| st. | Radish | Radish |  | Spinach |  | look o | page 28 |
| See page 13. | Early Turnip <br> Sweet Peas | Splnach Early Turnlp | Early Turnlp | Herbs | Late Potatoes | for de | piption. |

# Average Amount of Seed and Number of Plants for One Acre. 

| QUANTITY PER ACRE |  |
| :---: | :---: |
| Artichoke, 1 oz . to 500 plants. | 6 oz . |
| Asparagus, 1 oz . to 800 plants. | $4 \mathrm{oz}$. |
| Asparagus Roots. . | 1000 to 7250 |
| Barley.. | 95 to 110 lbs . |
| Beans in drills, @ $21 / 2 \mathrm{ft}$. | $11 / 2$ busb. |
| Beans Pole, Lima, @ $4 \times 4 \mathrm{ft}$. | 15 qts. |
| Beet, garden, 1 oz . to 100 ft . of drill. | 7 lbs . |
| Mangel, 1 oz . to 100 ft . of drill | 5 lbs . |
| Broccoli, 1 oz. to 5000 plants. | 2 oz . |
| Broom Corn, in drills. | 12 lbs. |
| Brussels Sprouts, 1 oz. to 5000 plants | 2 oz . |
| Buckwbeat. | 60 to 70 lbs . |
| Cabbage, 1 oz . to 5000 plants | 16 oz . |
| Carrot, $1 / 4 \mathrm{oz}$. to 100 ft . of drill. | 3 lbs . |
| Cauliflower, 1 oz . to 5000 plants |  |
| Celery, 1 oz. to 15000 plants. | 8 oz . |
| Cbicory. | 4 lbs . |
| Clover, Alsike. | 8 to 15 lbs . |
| Alfalfa or Lucerne. | 18 to 22 lbs . |
| Crimson | 12 to 15 lbs . |
| Red. | 10 to 15 lbs . |
| Sweet. | 25 lbs . |
| White (Dutch) | 10 lbs . |
| Collards, 1 oz . to 5000 plants |  |
| Corn, Rice (sbelled). | 4 lbs . |
| Field in hills | 14 lbs. |
| Sweet, $1 / 4 \mathrm{lb}$. to 100 bills | 14 lbs . |
| for fodder. | 3 busb. |
| Corn Salad in drills @ 10 in . | 25 lbs . |


| Quantity Per Acre |  |
| :---: | :---: |
| Cow Peas in drills. . broadcast | 60 to 90 lbs . $11 / 2$ to 2 busb . |
| Cress, $3 / 4 \mathrm{oz}$. to 100 ft . of drill | 12 lbs . |
| Cucumber, 1 oz . to 100 bills. in drills. | $\begin{aligned} & 1 \text { to } 3 \mathrm{lbs} . \\ & 5 \mathrm{lbs} . \end{aligned}$ |
| Dill, $1 / 3 \mathrm{oz}$. to 100 ft . of drill | 5 lbs . |
| Egg Plant, 1 oz . to 2000 plants. | 4 oz . |
| Endive, $1 / 4 \mathrm{oz}$. to 100 ft . of dril | $41 / 2 \mathrm{lbs}$. |
| Flax, broadcast. | 30 lbs . |
| Grass, Blue. | $1 / 2$ to 3 busb. |
| Orcbard | $11 / 2$ to 2 busb. |
| Pasture.......... | $21 / 2$ to 3 busb |
| Red Top or herds. | $11 / 2$ to 2 busb. |
| Rye..... | $1 / 2$ to 2 busb. |
| Timotby. | 2 to 25 lbs . |
| Grass-Millets, German | 50 lbs . |
| Golden | 50 lbs . |
| Hungarian | 30 lbs . |
| Japanese. | 20 lbs . |
| Hemp | 60 lbs . |
| Kobl Rabi. | 4 lbs . |
| Kale . | 5 lbs |
| Lettuce, in rows @ $21 / 2 \mathrm{ft}$. | 3 lbs . |
| Leek, in rows © $21 / 2 \mathrm{ft}$. | 4 lbs . |
| Lawn Grass. | 100 lbs . |
| Melon, Musk, in hills, $5 \times 5 \mathrm{ft}$. | 3 to 4 lbs . |
| Water, in hills, $8 \times 8 \mathrm{ft}$. | 4 to 5 lbs . |
| Mustard, broadcast. | 1/2 bush. |
| Oats. | 2 to 3 busb. |
| Okra, in drills. $21 / 2 \mathrm{x} 1 / 4 \mathrm{ft}$. | 25 lbs. |


| Quantity Per Acrra |  |
| :---: | :---: |
| Onion, in beds for sets. | 50 lbs . |
| in rows to make large bulbs. | 6 lbs . |
| Onion Sets, in drills. . . . . . . . . . . . | 6 to 12 busb. |
| Parsnips, in drills, @ $21 / 2 \mathrm{ft}$. | 5 to 10 lbs . |
| Parsley, in drills, @ 2 ft . | 5 lbs . |
| Peas, in drills. . broadcast | 1 to $11 / 2$ busb. 2 to 3 bush. |
| Pepper, 1 oz . to 1500 plants. | 3 oz . |
| Potatoes, cut tubers. | 8 to 10 busb. |
| Pumpkin, in bills, $8 \times 8 \mathrm{ft}$. | 8 to 10 lbs . |
| Radisb, in drills, @ 2 ft . | 6 lbs. |
| Rape, drills.... broadcast | $\begin{aligned} & 4 \text { to } 5 \text { lbs. } \\ & 5 \text { to } 10 \text { lbs. } \end{aligned}$ |
| Rye. | $11 / 2$ to 2 busb. |
| Sage, in drills. | 5 to 18 lbs. |
| Salsify, in drills, @ $21 / 2 \mathrm{ft}$. | 15 lbs . |
| Sorgbum, Forage, broadcast | 70 to 100 lbs. |
| Soy Beans, drills..... | 60 to 90 lbs . 90 to 120 lbs. |
| Spinacb, broadcast. | 30 lbs . |
| Squasb, busb, in bills $4 \times 4 \mathrm{ft}$. . . . running, in hills, $8 \times 8 \mathrm{ft}$. | $\begin{aligned} & 4 \text { lbs. } \\ & 3 \mathrm{lbs} . \end{aligned}$ |
| Sudan Grass, broadcast. in rows. | $\begin{aligned} & 16 \text { to } 24 \mathrm{lbs} . \\ & 3 \text { to } 4 \mathrm{lbs} . \end{aligned}$ |
| Sugar Cane or Sorgbum | 10 to 12 lbs . |
| Sunflower. | 10 lbs . |
| Tomato Seed, in bills, $4 \mathrm{x} 4 \mathrm{ft} . . .$. in frame. | $\begin{aligned} & 8 \mathrm{oz} . \\ & 3 \mathrm{oz} . \end{aligned}$ |
| Turnip, in drills, @ 2 ft . broadcast. | $\begin{aligned} & 4 \text { lbs. } \\ & 5 \text { lbs. } \end{aligned}$ |
| Vetcbes, broadcast. | 50 lbs . |
| Wheat, in drills | 11/4 busb. |
| broadcast | 2 bush. |

## Quantity of Seed to Sow a Single Row of 100 Yards



## REFERENCE TABLES (Continued)

Time Required for Maturity of Different Garden Crops Reckoned from Day of Planting the Seed.

Beans_String<br>Beets-Table<br>Beets-Stock.<br>Cabbage-Early<br>Cabbage-Late<br>Cauliflower.<br>Corn<br>Egg Plant Heading<br>Melon-Water<br>Melon-Musk<br>Onion.<br>Pepper.<br>Radish.............<br>Squash-Winter.<br>Tomato.

35 to 65 days 65 to 75 days 65 days
150 days
105 days
150 days
110 days
110 days
150 to 160 days
150 to 160 days 120 to 140 days 120 to 140 days 120 to 140 days 135 to 150 days 30 to 150 days 60 to 40 days 60 to 65 days

125 days
150 days
60 to 70 days

# Number of Plants Produced from an Ounce of Seed 



Average Time Required for Garden Seed to Germinate

| Bea | 5 to 10 days |
| :---: | :---: |
| Beets | 7 to 10 days |
| Cabbage | 5 to 10 days |
| Carrot | 12 to 18 days |
| Cauliflower | 5 to 10 days |
| Corn. | 5 to 8 days |
| Cucumber. | 6 to 10 days |
| Endive. | 5 to 10 days |
| Lettuce | 6 to 8 days |
| Onion | 7 to 10 days |
| Pea. | 6 to 10 days |
| Parsnip | 10 to 20 days |
| Parsley | 15 to 21 days |
| Peppers | 9 to 14 days |
| Radish | 3 to 6 days |
| Salsify. | 7 to 12 days |
| Tomato | 6 to 12 days |
| Turnip. | 4 to 8 days |

## FOREIGN NAMES OF VEGETABLES AND HERBS

## ENGLISH



FRENCH
Anis. Artichaut
Asperge.
Melisse citroneile
Basilic grand
Haricots.
Betterave
Chourrache. Brocoli
Chou de Bruxelles
Chou pommé.
Chou de Milan.
Cumin des prés.
Cumin de
Chou-fleur.
Céleri.
Céleri-rave
Chicorée sauvage
Coriandre.
Mache.
Mais.
Cresson alénois
Cresson de fontaine.
Concombre
Pissenlit
Aneth.
Aubergine.......
Chicorée-Scarole Ronde
Fenouil
Marrube blanc
Marrube blanc.
Raifort sa
Chou vert
Lavende.
Lavende.
Poireau
Laitue. ...
Melon.
Melon d'eau.
Champignon.
Capucine.
Gombaud
Oignon
Persil. .
Pois..
Piment.
Potiron
Rhubarbe.
Romarin.
Chou-navet
Chou-navet . . . . . . . . . . . . . . . . Cavolo navone.
Sauge . . . . . . . . . . . . . . . . . . . . . . . . . Zafferano
Sauge. . . . . . . . . . . . . . . . . . . . . . . . . Sassefrica.
Oseille. . . . . . . . . . . . . . . . . . . . . . . . Acetosa. .
Sarriette annuelle .
Epinard
Courge
Poiree.
Thym .
Navet.
Absinthe

ITALIAN
Aniso, Anacio
Articiocca.
. Mparagio.
. Melissa. .
Fasilicoli.
. Barbabietola
Boragine
Cavolo di Brusselles.
Cavolo cappuccio
Cavolo di Milano
Carvi..
Cavota....
Sedano......
. Cerfoglio
Cicoria selvatica.

- Coriandorlo.

Valeriana
Mais...
Nasturzio aquatico
Cetriolo
Dente di leone.
Aneto..
Petronciano.
Endivia. .......
Finocchio.
Aglio.
Marrubio
Rafano
Cavolo verde
Cavolo rapa.
Lavanda.
. Porro. .
Maggiorana.
Popone.
Melone d'aqua..
Nasturzio.
Ocra.
Prezzemolo.
Pastinaca.
.Pisello.
Peperone.
Zucca..
Ravanello.
Rabarbaro.

Santoreggia
Spinace.
Zucca..
Bieta.
Timo. Pomo doro
Navone.
. Assenzio.

POLISH
Anyz.
Karczochy
Sarczochy
Balsam.
Bazylia
Buraki.
Boraz.
Brokuly
Kapusta
Sabaudzka Kapusta.
Kminek. .
Kalafiory. Selery
Czech (Korzen).
Cykorya
Koledra
Ziarno Salaty
Kukurydza.
Rzerzucha.
Rzerzucha wodna.
Ogorek.
Papawa
Koper
Gruszka milosna
. Endywia
Koper.
Marubium.
Chrzan. . . . . . . . . . . . . . Marrubio.
. Hyzop...
Solanka..
Lawenda.
Pory.
. Majata. . .
Melon.
Melon, wodny
Grzyb. ..
Nasturcya.
Cebula
Pietruszka.
Pasternak
Groch.
. Bania.
Rzodkiew . .
Rubarbarum
Rozmaryn..
Ruta.
Szafran.
Szalwija........
Caber ogrodowy
Szpinak.
Macierzanka
Pomidor.
Rzepa, brukiew
Piotun
SPANISH
Alcachofa
. Esparrago. .

Borraja.
Col repello . .

Maiz.
Berro...

Anis, Matalahuga
Toronjil. Citronella
Albaca Citronella. . . . . . . Citronen-
Albaca. . . . . . . . . . . . . . . . Basilikum
Habichuela. . . . . . . . . . . . . . . . . . . . . . .
. Remolacha. . . . . . . . . . . . . . . . . Rübe Boretsch
Bretones de Bruselas
Col repello . . . . . . . . . . . . . . . Kopfkohl, Wirsing
Comino... . . . . . . . . . . . . . . . . . Feld-Kirsing
. Conahoria . . . . . . . . . . . . . . . . . . . . . Blumenkotten, Mó
Apio . . . . . . . . . . . . . . . . . . . . Sellerie
.Apio raiz de nabo........... . Knorlen-Selleric
. Perifollo . . . . . . . . . . . . . . . . . Kerbel
. Achicoria....................ichorienwurzel
Canonigos. . . . . . . . . . . . . . . . . . . . . . Feldsalat
Mais
Garten-Kresse
Brunnenkresse
Gurken
Löwenzahn
Dill
Eierpflanze
Endivien
Endivien
Escariol
Fenchel
Knoblauch
Andorn
Meer Rettig
Meer Rettig
Isop
Blätterkohl
Blätterkoh
Knollkohl
Lavendel
Porree, Lauch
Lattich, K
Majoran
Majoran
Welone
Schwamm
Kapuciner Kresse
Ocher
Zwiebel
Petersilie
Pastinake
Erbsen
Preffer
Melonen-Kurbiss
Radies
Rhabarber
Rhabarber
Rosmar
Kohlrübe, Wrucken
Safran
Safran
Haferwurzel
Haferwurzel
Sauerampfer
Bohnenkraut
Spinat
Kirbiss
Beisskohl
Thymian
Liebesapfel
Welsse-Räbe
Wermuth
GERMAN
is, Grüner Anis
choke
Melisse

Boretsch
pargelkohl
Rosenkohl
-Kümmel
ten, Möhren
Sellerie
Knollen

| . Diente de leon. | Löwenzahn |
| :---: | :---: |
| . Eneldo. | Dill |
| Berengena | Eierpflanze |
| . Endivia. . | Endivien |
| . Escarolo | Escariol |
| Hinojo | Fenchel |
| . Ajo.. | Knoblauch |
| . Marrubio | Andorn |
| Taramago. | Meer Rettig |
| . Hisopo . | Isop |
| . Breton, Berza | Blätterkohl |
| . Col rabano. . | Knollkohl |
| . Espliego. . | Lavendel |
| . Puerro.. | Porree, Lauch |
| Lechuga. | Lattich, Kopfsalat |
| . Mejorana. | Majoran |
| Melon. | Melone |
| . Sandia | Wasser-Melone |
| Seta. | Schwamm |
| Capuchina | Kapuciner Kresse |

Cebolla. . . . . . . . . . . . . . . . . . . . . . . . . Zwiebel
Chirivia . . . . . . . . . . . . . . . . . . .


Rabanito . . . . . . . . . . . . . . . . . . . Rad Rabrber
Ruibarbo. . . . . . . . . . . . . . . . . . . . . . . Rosmarin
Col nabo, Nabicol. . . . . . . . . . . . Kohlrübe, Wrucken

 be
(1)

| Dis. apart | No. plants |
| :---: | :---: |
| $12 \times 1 \mathrm{In}$. | 522,720 |
| $12 \times 3$ | 174,240 |
| $12 \times 12$ | 43,560 |
| $16 \times 1$ | . 392,040 |
| $18 \times 1$ | 348,480 |
| $18 \times 3$ | 116,160 |
| $18 \times 12$ " | 29,040 |
| 18x 18 " | 19,360 |
| $20 \times 1$ " | .313,635 |
| $20 \times 20$ | 15,681 |
| $24 \times 1$ | .261,360 |
| $24 \times 18$ | 15,520 |

Number of plants to the acre at given distances

| Dis. apart | No. plants |
| :---: | :---: |
| $24 \times 24$ In. | 10,890 |
| $30 \times 1$ | 209,088 |
| $30 \times 6$ | 34,848 |
| $30 \times 12$ | 17,424 |
| $30 \times 16$ | 13,068 |
| $30 \times 20$ | 10,454 |
| $30 \times 24$ | 8,712 |
| $30 \times 30$ | 6,970 |
| $36 \times 3$ | 58,080 |
| $36 \times 12$ | 14,520 |
| $36 \times 18$ | 9,680 |
| $36 \times 24$ | 7,260 |


| Dis. apart | No. plants |
| :---: | :---: |
| $36 \times 36 \mathrm{In}$. | 4,840 |
| $42 \times 12$ | 12,446 |
| $42 \times 24$ | 6,223 |
| $42 \times 36$ | 4,148 |
| $48 \times 12$ | 10,890 |
| $48 \times 18$ | 7,790 |
| $48 \times 24$ | 5,445 |
| $48 \times 30$ | 4,356 |
| $48 \times 36$ | 3,630 |
| $48 \times 48$ | 2,723 |
| $60 \times 36$ | 2,901 |
| $60 \times 48$ | 2,178 |


| Dis. apart | No. plants |
| :---: | :---: |
| $60 \times 60 \mathrm{In}$. | 1,743 |
| $8 \times 1 \mathrm{Ft}$. | 5,445 |
| $8 \times 3$ | 1,815 |
| $8 \times 8$ " | 680 |
| 10 x 1 " | 4,356 |
| 10 x 6 " | 726 |
| $10 \times 10$ | 435 |
| $12 \times 1$ | 3,630 |
| $12 \times 5$ | 736 |
| $12 \times 12$ | 302 |
| $16 \times 1$ | 2,722 |
| $16 \times 16$ | 170 |

Table Showing the Weight of Various Artlcles.

Barley. . . . . . . . . . . . . . . per bushel, 48 lbs.
Beans.
Buckwheat.
Broom Corn
Blue Grass.
Clover Seed.
Corn, shelled
Corn, on the ear
Flax Seed.
German Millet.
. per bushel, 60 lbs . per bushel, 48 lbs. .per bushel, 46 lbs. . per bushel, 14 lbs. per bushel, 60 lbs. . per bushel, 56 lbs . . per bushel, 70 lbs. .per bushel, 56 lbs. per bushel, 50 lbs .

Hemp Seed.
Hungarian Grass Seed. Millet, Japanese. Oats.
Onion Sets.
Orchard Grass
Perennial Rye Grass. Peas.
Red Top Solid Seed.
per bushel, 40 lbs . per bushel, 48 lbs . . per bushel, 30 lbs. .per bushel, 32 lbs. . per bushel, 32 lbs . per bushel, 14 lbs . per bushel, 24 lbs. .per bushel, 60 lbs . per bushel, 32 lbs.

Rye. .
Sorghum.
Spinach .
Sudan Grass
Timothy Seed.
Top Onions.
Turnips.
Vetches.
Wheat.
per bushel, 56 lbs . per bushel, 50 lbs. per bushel, 40 lbs. per bushel, 35 lbs. per bushel, 45 lbs . per bushel, 28 lbs. per bushel, 55 lbs . per bushel, 60 lbs . per bushel, 60 lbs .


Mulford Cultures contain pure, tested strains of active, vigorous nitrogen-fixing bacteria, for inoculating seeds of legumes or soil.

Mulford Cultures are scientifically prepared and tested with the utmost care and skill. Enormous numbers of these very valuable and desirable bacteria are thus available to you in every package of Mulford Culture and may readily be applied to your seed. The sealed bottle insures purity.

Legumes offer the best-known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of wheat, cotton, corn and other non-legume crops.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacteria to induce a prompt "catch" and increase your yield.

Mulford Cultures are scientifically prepared and tested by experts in the biological laboratories of H. K. Mulford Co., Philadelphia, U. S. A., with the same degree of care as Mulford Antitoxins, Serums, Vaccines, etc., which are standard all over the world.

Always specify on your order what crop you want to inoculate, as there is a different strain of bacteria for each legume.
 SWEET CLOVER WHITE CLOVER ALSIKE CLOVER ALSIKE CLOVER
Mammoth Clover

BURR CLOVER
Yellow Clover
Berseem Clover
COW PEAS
SOY BEANS
Canada Field Peas
PEANUTS
VETCH

Horse Beans
Horse Beans
Perennial Peas
SWEET PEAS
GARDEN PEAS
GARDEN BEANS
LIMA BEANS
Lupins
Sainfoin
Sainfoin
Lespedeza
Beggar Weed
Kudzu
and others
Those printed in CAPITAL LETTERS can be shipped immediately from stock. The others will be prepared to order and can be supplied in a few days.

PRICES
Mulford Cultures are supplied for the varieties of legumes listed, at the following prices:
5-Acre Size, $\$ 5.00$.
("Dollar per Acre") 5-Acre Size,
1-Acre Size.
1 -4 Acre Size
. . . . . . . . . . . . $\$ 1.50$ 1-4 Acre Size................................................................................. Small Size (Supplied only in 4 varieties, for Garden Peas, Garden
Beans, Lima Beans and Sweet Peas). . . . . . . . . . . . . . . . . . 35 Beans, Lima Beans and Sweet Peas)
These Prices include delivery on freight shipments.

## SPECIAL NOTE

The quantity of bacteria furnished in the Mulford Cultures is based on the area or acreage to be inoculated and we recommend that, for best results, the cultures be used on this basis. You will find it the most economical and effective plan, in the long run.

In the case of some crops, which are sown with a comparatively small amount of seed per acre, there is sufficient Mulford Culture in a package to inoculate seed for two or three times the acreage indicated on the label.

If you are willing to risk the success of your crop by spreading the culture more thinly over a larger area, you will find MULFORD CUlTURES to be the most economical form of legume inoculation on the market.
FREE DESCRIPTIVE FOLDER SENT UPON REQUEST


SOY BEAN

## FIELD AND FORAGE SEEDS

Barley-Six-Rowed-Finest sort for growing in Pennsylvania or New Jersey. Makes a good stiff straw, standing up well. Is the earliest among the beardless varieties, making a quickgrowing crop of excellent and nutritious green fodder, and is growing in popularity wherever used, and will also make a good grain crop, although its principal value is as an early nutritious forage crop, to feed green or to cure as hay. If for the latter, it should be cut when in the milky state.

Sow $21 / 2$ bushels per acre. Per bushel ( 48 lbs .) Market Price.
Broom Corn-Early Evergreen-This variety is the most popular to sow for market. It is a very bright green color. Makes by far the best brooms of any corn grown, and commands the very highest prices. Height, 7 to 8 feet.
Sow in drills 12 lbs . per acre, or if in rows 8 to 10 lbs . per acre. Per bushel ( 46 lbs .) Market Price.
Buckwheat-Silver Hull-This variety has a large, plump, silvery grain. The plant continues to bloom longer than common Buckwheat, thus producing a larger crop. Per bushel ( 48 lbs .) Market Price.
Buckwheat (Japanese)-This variety of Buckwheat is a great improvement over the old kind in the following respects: The new Japanese grows with astonishing vigor and begins to mature its grains in about fifty days, its extreme earliness insuring safety from frosts, where the other kinds often get caught. 2d. A most valuable quality is its ability to withstand wind-storms and not lodge. 3d. It holds its grain in harvesting. It has been known to stand uncut a month after its proper time for ripening, and without apparent loss from lodging or grains separating. 4th. In yield it excels, one peck yielding from 36 to 52 bushels. Its flour is the whitest and finest of all Buckwheat. 5th. It will do well on soil too rich or too poor to support the old varieties. 6th. It will withstand sunblight almost perfectly.
Sow one bushel per acre. Per bushel ( 48 lbs.) Market Price. * Canada Field Peas. Here is a crop which is not only profitable, but will return to the land the much needed nitrogen. Peas are second only to Clover in their soil enriching properties and can be grown under almost any condition of soil or climate. There is always a ready market for Peas, or they can be profitably ground and fed to the stock. The vines make rich, nutritious hay. If fed to milch cows, when in a green state, pods, vines and all, the flow of milk will be almost doubled.
Peas are a paying crop, and can be profitably planted in many ways.

First. When sown alone about three bushels are required to the acre. They can be matured and threshed when dry. The yield will vary from 30 to 60 bushels an acre.

Second. Peas and Oats are frequently sown together, using $11 / 2$ bushels of Peas and 2 bushels of Oats an acre. By so doing a double crop can be secured. They can be threshed at one time and readily separated in cleaning.
Third. They can be sown alone or with Oats and fed green. It is surprising the a mount of fodder which is produced in this way. If sown together, the Peas should be sown first and plowed under about four inches deep, the Oats may then be drilled in.

Fourth. For plowing under when Peas and Oats are sown together and each are "in milk" they are nearly equal in value to Clover, used in the same way to enrich the soil. Sown in January, February or early March. Per bushel ( 60 lbs .) Market Price.

## CLOVER SEEDS

* Alsike Clover. Alsike Clover grows thicker and is finer in growth than Red Clover, making better hay and probably more and better grazing. It is also hardier, resisting extremes of heat and drought and also severely cold weather to a remarkable extent. It is perennial and does not Winter kill. It succeeds on a variety of soils, light upland loamy lands as well as stiff bottom lands. It will do better on moist land than any other Clover. It is surer to give a good stand and make good crops than either the Red or Mammoth Clover, and in sections where these Clovers have been uncertain Alsike is superseding them altogether. When sown with other grasses it forms a quick undergrowth and greatly increases the yield. It is well adapted for sowing with Red Clover, Timothy, Herd's Grass, as it matures with these grasses, but fowering a little later than Red Clover.
Sow in the Spring or Fall at the rate of 12 lbs . per acre. Per bushel ( 60 lbs .) Market Price.
* Alfalfa. Alfalfa is the most talked of and most widely planted of all the varieties of clover in the world.

The U. S. Department of Agriculture says: "In addition to the hay crop, Alfalfa at two years adds $\$ 100$ to the value of every acre on which it grows. There is no State in the Union in which Alfalfa cannot be successfully grown." This is saying a good deal but it has been proven true.

Alfalfa will produce 4 to 6 tons of hay to the acre each year and in money value is worth 45 per cent. more than other clovers and 60 per cent. more than Timothy hay. It will grow 4 crops a year and it does not exhaust the soil; it enriches the soil. Its long, branching roots penetrate far down, 15 to 20 feet, and so loosen the subsoil that it is a gigantic subsoiler, resists drought, and gets plant food where other crops would be a failure. When the plants are destroyed in order to raise other crops on Alfalfa Land, the large roots decay and produce a vast source of fertility to be used by following crops.

It is said that the feeding value of a ton of Alfalfa is equal to a ton of shelled corn.

Many other interesting facts might be given about Alfalfa. We can't say too much for it because it's a working plant which is changing the destiny of many farming sections. No farmer with stock can afford to let it go without trial.

Although fall sowing is preferable, good results can be obtained from early spring sowing. Give it care and attention, especially the first year, and your trial will show you that you cannot afford to be without it. Get it thoroughly established by first preparing your land, applying plenty of lime, and before seeding you should inoculate the seed. If your land has never had Alfalfa growing on it before be sure to inoculate the seed with nitrogen gathering bacteria for Alfalfa, for without inoculation your success is exceedingly doubtful. The Alfalfa bacteria, Mulford's Nitro Culture, is fully described on page 3.

When once established, Alfalfa is the most valuable permanent clover that can be grown. It is adapted to all parts of the United States and has the highest feeding value of any hay. Do not sow on wet ground, high and rather dry being preferable, and only cut when coming into bloom. Sow 20 lbs . per acre. Per bushel ( 60 lbs .) Market Price.

* Crimson or Scarlet Clover. Or more commonly called Scarlet, Italian or German Clover, is an annual of French origin, makes a growth from 20 to 30 inches high, has a bright crimson blossom from $1 \frac{1}{2}$ to 3 inches long, and when in full bloom with its luxuriant growth of green foliage and its crimson bloom, is a thing of beauty. It is a winter crop, and should be sown in July, August or September of each year. As a manurial crop it is worth in fertilizer value thirty to forty dollars per acre. Sow at rate of 15 lbs . per acre. Per bushel ( 60 lbs .) Market Price.
* Mammoth, Sapling or Pea Vine Clover. This is similar to Medium or Common Red Clover both in the appearance of the seed and its habit of growth, the difference being that it usually grows larger and is later maturing. It is considered superior as an improver on account of the extra growth. It is a good variety for thin soils, or to seed with Timothy, meadow Fescue or Herd's Grass or Red Top, as it matures about the same time as these grasses. Is best adapted for ploughing under as green manure; it grows five or six feet high, has large, coarse stalks, which are not liked by cattle. It is not ready to cut for hay until long after the common variety, and when cut leaves the ground bare, making no second growth. Sow about 12 lbs . per acre, if sown alone; or with Timothy sow 6 lbs . of the clover and 8 lbs . of Timothy, which should make a liberal seeding. Per bushel ( 60 lbs .) Market Price.
* Medium, or Common Red. This is the most important of all varieties of Clover for practical farm purposes; makes excellent pasturage, and fine hay crops when sown with Timothy, Orchard and other grasses, as the latter ripen about the same time. It is one of the best fodders for milch cows or sheep, and improves the land by adding humus to the soil.
It is a perennial, growing to a height of $11 / 2$ to 2 feet, yields crops several years from one seeding, and on good land, yields two to three cuttings annually. It should be cut for hay when in full bloom.
Sown by itself, sow either in Fall (July 1st to Sept. 5th) or in Spring (Feb. 1st to April 15th) at the rate of twelve to fifteen pounds per acre, according to nature of the soil. Per bushel ( 60 lbs .) Market Price.
* White Blossom, Sweet Clover or Bokhara. Is a hardy biennial plant of an erect and branching habit.
It starts up early in the Spring and in its second year it reaches a height of from 5 to 12 feet, blooms, matures its seed and dies.

However, there is usually enough seed scattered to reseed, and the crop is continuous unless cut before seed ripens.
When young it resembles Alfalfa. Sweet Clover has a peculiar bitter taste. The flowers and leaves possess an odor like vanilla. It is an excellent bee food. Grows well in all climates and soils, whether gravel, clay or sand.

Stands droughty weather equally as well as alfalfa, yet will grow in wet places.
Is a deep rooting legume, storing up Nitrogen like Cow Peas, thus possessing great fertilizing properties. Two crops can be cut in a season. It is a good silo feed.
Sow in Fall or Spring, 15 to 20 lbs . per acre. Per bushel ( 60 lbs .) Market Price.

* Yellow Annual Sweet. This being only an annual and much smaller in growth, is not so desirable. To be sown early in Spring at rate of 25 lbs . per acre. Per bushel ( 60 lbs .) Market Price.

White Dutch Clover. A small, low growing variety, with creeping stems; mixed with Blue Grass or Perennial Rye Grass, or Timothy, it makes a permanent pasture of great value. It is very largely used in lawn and pasturage mixtures, and is indigenous to the soils throughout this section. It makes a small, close, compact growth, covering the ground like a carpet. Succeeds and does well all throughout the North. Its blossoms are round, white, tinged with red, and sweet scented; stems fine and palatable, with numerous leaves of bright green color, blotched with white. Sow either in the Spring or Fall. When sown by itself, sow at the rate of ten lbs. per acre. It is better, however, sown in mixture with other grasses. Per bushel ( 60 lbs .) Market Price.

Flax. Farmers should not lose sight of the fact that Flax can be raised where Wheat is raised, and where tried has brought better returns for the amount of labor expended than Wheat.

Sow 30 to 40 lbs . per acre. Per bushel ( 56 lbs .) Market Price.
Hemp. This is a crop that deserves more attention. The fibre is in demand in all markets, and the seed can be marketed for feed.

Sow 1 to $11 / 2$ bushels per acre broadcast, or $1 / 2$ bushel in drills. Per bushel ( 40 lbs .) Market Price.
Kaffir Corn is becoming more valuable every year because of its drought resisting qualities. Grows 4 to 5 feet high, is very stocky and leafy; valuable alike for forage and grain. Plant from March to July, in rows 3 feet apart, drilling seed thinly like sorghum. If wanted for grain, principally, let heads mature on the stalk and then the whole stalk may be cut for fodder after the seed heads have been cut. If wanted for fodder, mainly, cut down the stalks when first seed heads begin to appear, leaving 4 to 5 inches of stubble. From this stubble will spring a second growth, making an excellent crop of forage and a fair crop of grain. Stalks keep green and juicy to the last. For poultry feed and small grain it is unexcelled.

Sow 5 lbs. per acre in rows 3 feet apart and cultivate same as corn. For fodder 1 to $11 / 2$ bushels per acre broadcast or in drills. Per bushel ( 50 lbs .) Market Price.

## COW PEAS

Cow Peas. The Southern Cow Pea (in reality a bean) has been cultivated in the South for many years, but only in recent years has it been demonstrated that most all varieties are adapted to cultivation throughout the entire United States. They now are one of our most valuable farm products.

As a fertilizer they come next to clover, to be plowed under when they commence to blossom; they will grow on land that will not produce clover.

As a fertilizer crop it excels all others, absorbing from the air more nitrogen than clover, and drawing from the subsoil large amounts of potash and phosphoric acid, depositing these fertilizer elements in the surface soil, just where needed for succeeding crops.

Cow peas afford excellent midsummer pasturage, but the best way for using green is to cut and feed to stock. Sow $1 \frac{1}{2}$ to 2 bushels per acre broadcast.

Black. A standard trailing variety; and very extensively grown. Very prolific; early to mature; somewhat later than Whippoorwill. Makes a fine growth of foliage. Per bushel ( 60 lbs.) Market Price.

Black-Eye-(Black-eyed Susan, or Sand Pea.) Later than Whippoorwill. Vines erect. Fodder long. An excellent soil improver. Similar in growth of vine and action of roots upon the soil as the other Cow Peas. Per bushel ( 60 lbs .) Market Price.

Gray Crowder, or Improved Whippoorwill. Very early in maturity. The vines are not runners, but grow erect in bunches. The seed is brown speckled. Per bushel ( 60 lbs .) Market Price.

New Era. Upright in growth, quicker to mature than Whippoorwill, prolific in peas. The vines make a large growth, cure easily, and make fine, dry forage. The seeds are of a dull red color, and, being smaller than ordinary Cow Peas, less seed is required to sow an acre, 1 to $11 / 2$ bushels being ample.

Per bushel ( 60 lbs .) Market Price.
Whippoorwill. An early erect-growing bunch variety. The seed is brown speckled and more easily gathered than from the vine-growing sorts. Early in maturity and habit of growth. Good between corn.

Per bushel ( 60 lbs .) Market Price.

## MILLETS

Millets seldom have a regular place in farm crop rotation, but are used rather as a "catch" or substitute crop. Millet is a quick-growing crop and may be sown in June after the season is too far advanced for planting corn. Where corn cannot be planted to advantage, land is rough, labor scarce, or there is liable to be a shortage of hay, Millet has long been a favorite crop. It is also an excellent crop to grow on foul land to get rid of weeds, giving practically the same results as fallowing, or summer cultivation, and in addition a crop of forage. Following are descriptions of some of the standard varieties.

Millet-Golden Millet. A much improved variety medium, early, growing three to five feet high; the heads are closely condensed, though the spikes are very numerous. It is an enormous cropper; should be sown not less than one bushel per acre, if less will grow coarse and woody, in which state it is not relished by cattle. Millet is somewhat difficult to cure, and if it can be matured early enough to get the warm sun of August or September, it will be a decided advantage, but sixty days is usually long enough to grow it for hay. It should be cut for hay as soon as it comes into blossom.

It must be remembered that Tennessee German Millet is the best in the world, being sown and cultivated for seed and compared with seed grown elsewhere the Tennessee grown is purer and better in every way.
Sow 1 to $1 \frac{1}{4}$ bushel per acre. Per bushel ( 50 lbs .) Market Price.
Millet-Hungarian. This belongs to the millet family, growing less rank, with small stalks often yielding two to three tons of hay per acre; like millet it is an annual, and requires to be sown every season, but will produce a larger return than almost any other crop. Sow one bushel per acre and cultivate like millet; all kinds of stock eat it with avidity.

Per bushel ( 48 lbs .) Market Price.
Millet-Japanese, or Barnyard. Frequently called the Billion Dollar Grass. An excellent fodder plant, growing from 6 to 8 feet high, producing 12 to 20 tons of hay per acre.

Oats-Welcome. Very plump, heavy grain, and close husks. In favorable seasons they will weigh from 40 to 45 lbs . per bushel. This variety grows from 5 to 6 feet high in rich soil and cool locations. The heads branch freely on all sides, and are from 16 to 22 inches in length. The straw is straight.

This variety is well suited to the climate of Pennsylvania and New Jersey. In warmer localities it will not produce so heavily, nor make such heavy grain. It is early in maturity, ripening one week ahead of other sorts. It will yield good crops where other varieties cannot be grown profitably. Per bushel ( 32 lbs .) Market Price.

## Onion Sets-(See page 26).

Rape-Dwarf Essex. This plant is one of the most valuable forage crops ever introduced into this country and is highly recommended for succulent forage from early Spring to the Winter months. For sheep, swine or poultry it is unexcelled. The feeding value is very high; it is a great fattener.
This seed may be sown in many ways to suit conditions existing in various locations. It may be sown in early spring, or after the soil has produced an early maturing forage crop, or just before the last cultivation of corn. An acre of rape will be ready to pasture is six weeks from time of sowing.
Sow 3 lbs . to an acre in rows $21 / 2$ feet apart, or broadcast at rate of 6 lbs . to one acre. Our stock is the genuine Dwarf Essex and not the worthless annual. Per bushel ( 50 lbs .) Price on Application.

Rye-Spring. This article has proved itself a good cropper and straw producer. It has come to stay. The growth is as tall as the Winter variety. It requires $13 / 4$ to 2 bushels per acre, and the seed product being 20 to 25 bushels per acre. A great many people use it in preference to Winter rye, and think it pays better than oats. Distinct from the Winter rye, grain of finer quality and more productive; and can be successfully grown in any latitude. It is now being largely sown in the North in the place of oats, being a more profitable crop on account of the production of nearly four times the straw. Per bushel ( 56 lbs .) Market Price.

Rye-Winter. This is one of the most important of farm crops. In the first place it is a sure crop, failures being almost unknown. Every farmer should have at least a few acres of it. It is usually sown in the Fall, and as it grows very vigorously, will furnish pasture till late in the Fall, and also early in the Spring, before other grasses have made a growth. So it is of great value to dairy farmers. If sown early in the Spring it makes an early and abundant pasture, but it makes no grain crop. Grown for the grain alone it will yield good returns. It is a good Spring soiling crop, giving the earliest bite of green stuff, makes fair hay if cut in bloom or before fully headed out. Useful also for a manuring crop if turned under in early Spring. Rye improves worn-out soils. Sow at last working of corn, or by itself from July to November, at the rate of $13 / 4$ to 2 bushels per acre. Per bushel ( 56 lbs.) Market Price.

## SOY BEANS



Soja or Soy Beans make a splendid forage crop; they are very nutritious and make a heavy growth of vine. They improve the soil, make a good ensilage and withstand drought better than any other forage crop. They make excellent hog feed and a splendid yield of Beans, which ripen at the same time. They are adapted to growing on almost all kinds of soils and are being more generally sown each year, as their value becomes known.

Mammoth Yellow. Well adapted for improving poor soils. Is an immense yielder of excellent fodder relished by all cattle. Sow May 15 th to June 15 th. One-half bushel per acre in drills two and one-half feet apart. Per bushel ( 60 lbs .) Market Price.

Black Wilson. An excellent variety for Middle and Eastern States. Grows 36 to 44 inches high, branches well, holds leaves and the seeds do not shatter from pods after cutting. In Delaware it matured in 115 days, and the plants held the seed well. Per bushel ( 60 lbs .) Market Price.

Sorghum-Early Amber. The earliest in cultivation, black hulled, most suitable for hay; is a great hog feed. Sow from April to July at rate of 1 bushel per acre broadcast. In drills, 8 to 12 lbs. Per bushel ( 50 lbs.) Market Price.

Timothy. A native of Europe, but long ago naturalized in America, where it ranks as by far the most important of hay grasses. On moist, loamy or clayey soil it produces a larger hay crop than any other grass. It is not as well suited for light, sandy soils, though preferring a moist, temperate climate, it withstands drought and extreme heat and cold. Its hay is very nourishing and can be preserved for a long time. It should be cut when flowering, as if left later the hay becomes hard and coarse. It is often sown with Red Top Grass and Red Clover, and the nutritive value of the hay is greatly increased by this mixture. If sown alone, at least 25 pounds to the acre should be used; with Red-Top Grass and Red Clover, 15 pounds of Timothy, 12 pounds of Red-Top Grass (Fancy) and 3 pounds of Red Clover; or with Red Clover only, 20 pounds of Timothy and 5 pounds of Clover. The seed weighs 45 pounds to the bushel. Several grades are always on the market, differing in purity and vitality, but the seed we offer is of the very highest quality and extra clean. It is always most economical to buy the highest grade, known as "Fancy." Per bushel ( 45 lbs .) Market Price.

* Vetch-Spring-(Vicia Sativa). Culture same as for peas. Valuable as a cover crop. Sow 2 bushels per acre. It is quicker in growth than Winter Vetch, and makes a splendid forage and hay crop, and is an excellent soil improver. When sown with barley or oats use 1 bushel to 30 lbs . Spring Vetch to the acre. ( 60 lbs. per bushel) Market Price.

Vetch-Winter-(Vicia Villosa, Sand or Hairy Vetch). Sand-Vetch is a very valuable forage plant and is rapidly becoming extremely popular as year after year the farmers of this country are learning more of its true value. It is noted for its extreme hardiness, is highly valuable in the North as a Winter cover crop to prevent leaching; is also valuable for forage and fertilizing purposes. It withstands hard Winters, being hardier than wheat. It is an annual, but drops its seed freely and will come up year after year on the same ground. It belongs to the pea family, but the vines are nearly twice as long and leafy as peas. It may be sown in the Spring or Fall with any crop of grain. It remains green all Winter and is valuable for early pasturing as well as for fertilizing. It is extremely early and has enormous value for feeding purposes. Drought, heat and cold do not affect it. It is eagerly eaten by all kinds of stock.

If sown in April or early May it can be cut in July. Yields 12 to 20 tons green fodder to the acre. Sow $1 / 2$ bushel per acre. Per bushel ( 60 lbs .) Market Price.

Wheat. We carry a full line of all the principal varieties of Seed Wheat when in season. Our stock is all re-cleaned on our own premises, and customers can rely upon us to furnish the best and cleanest stock, true to name. Among the sorts offered are Fulcaster, Fultz, Longberry, Miracle, St. Louis Prize and others. Per bushel ( 60 lbs .) Market Price.

## NITROGEN GATHERING BACTERIA

If you want to increase your yield inoculate the seed before plantling with MULFORD CULTURE. MULFORD CULTURE offers the best known means of maintaining soll fertility and rejuvenatling over-cropped and worn-out fields.

MULFORD CULTURE: $1 / 4$ acre slze, 75c.; 1 acre slze $\$ 1.50$; 5 acre size $\$ 5.00$ ("Dollar per Acre").

When ordering be sure and specify what crop you want to Inoculate, as each leguminous crop requires a separate culture.

## NATURAL GRASSES

Canada Blue Grass (Poa Compressa). Highest grade. A very hardy perennial grass, with creeping root-stocks. It grows on the poorest and driest soils, sandy, gravelly or clayey, standing extremes of wetness or drought, and keeping green until the severe frosts of winter. It is especially valuable for dairy pastures, cows feeding on it yielding the richest milk from which the finest butter is made. It is distinguished from the Kentucky Blue Grass by its flattened, wiry stems and by its decidedly bluer color. Sow 60 pounds to the acre. Per bushel ( 14 lbs .) Market Price.

Meadow Fescue-English Blue Grass (Festuca Pratensis). One of the grasses most used in permanent or temporary meadows for mowing or for pasture. It succeeds best in cold, moist, light soils, in well-drained meadows and in low valleys rich in organic matter. It should not be grown at all on warm, dry land. It does not reach its full development until the second or third years, when it far exceeds most other sorts in the quantity of its produce and nutritive matter. After being mown, it grows again very quickly. The forage, either green or dried, is very nourishing and much relished by cattle, especially when cut young. Sow 40 pounds to the acre. Per bushel ( 14 lbs .) Market Price.

Kentucky Blue Grass-June Grass (Poa Pratensis). Highest grade. One of the most widely distributed and valuable native grasses. It combines more points of excellence than any other sort. It is a true perennial, lasting indefinitely and improving every year. Its densely creeping root stocks, spreading habit and smooth, even growth, fine texture, and rich green color render it one of the very best grasses for lawns. It forms a close turf, starts very early in the Spring, and lasts till frost. It succeeds in almost any soil-dry, rocky, sandy or gravelly-and stands long continued dry weather and hot suns. It takes, however, two or three years to become well established, and should, therefore, be sown only in connection with other grasses. If the soil is especially suitable, it will eventually crowd these out and make the finest possible sward. It is one of our most valuable pasture grasses, very productive and nutritious. Sow 50 pounds to the acre. Per bushel ( 14 lbs .) Market Price.

Creeping Bent-The only true Creeping Bent Grass (Agrostis Stolonifera, True). The distinctive feature of this species is, as the name implies, its compact, creeping, rooting stems. It is of rapid growth and spreading habit, and the stoloniferous roots which it sends down into the soil form a strong, enduring turf that is positively improved by constant trampling. The other varieties of Agrostis are distinguished from this sort by their flattened, parallel surface roots. Being of fine texture, it is most valuable for lawns and putting-greens. If sown alone, 60 pounds to the acre should be used. Per bushel ( 16 lbs .) Market Price.

Hard Fescue (Festuca Duriuscula). A sub-variety of Sheep's Fescue, growing about 2 feet high. It is a small, even, tuftforming grass with narrow blades and still finer bottom leaves of a deep green color. It thrives on both medium and light soils, and is frequently used in lawn mixtures. Per bushel ( 12 lbs .) Market Price.

Herd or Red Top, Unhulled (Agrostis Vulgaris). A permanent and very hardy native perennial grass, succeeding best on moist land, making a good pasture when fed close; is valuable for low, wet meadows, producing large crops of good hay. It accommodates itself to a variety of soils, however, even to quite dry situations, and stands our hot climate admirably. It is, perhaps, the most permanent grass we have. It remains green for the greater part of the year; sown with Timothy and Red Clover, its stems form a very close matting turf, not affected by trampling, and of fair quality when not allowed to go to seed. Sow 2 to 3 bushels per acre. Per bushel ( 10 lbs .) Market Price.

Herd or Red Top (Fancy Recleaned). This is the pure seed of Herd or Red Top with the lighter seeds and chaff screened out, and therefore sells at a much higher price. We furnish extra clean stock only. Per bushel ( 32 lbs.) Market Price.

Italian Rye (Lolium Italicum). When sown alone early in Spring it thrives quickly and can be mowed twice the same year and produces fine fodder. The Italian Rye Grass, being an annual, is preferable to the Perennial, where a one year's stand only is required, but if the field is to stand over the second year we would prefer the Perennial, as it is stronger, but, on the other hand, the Italian gives larger yields, and is less hard and wiry. Per bushel ( 24 lbs .) Market Price.

Orchard Grass (Dactylis Glomerata). A most valuable grass for pasture or hay land, and on account of its earliness very valuable for permanent pastures. It furnishes the first green bite in the Spring two weeks earlier than most grasses, and when fed off is again ready for grazing in a week, and the last in the Fall, and is quick to recover from close cropping, and even thrives better the more it is cropped. It is palatable and nutritious and stock eat it readily when green; it will also withstand severe drought, keeping green where many grasses wither, and will endure considerable shade as in orchards and groves. Sow $11 / 2$ to 2 bushels per acre. Per bushel ( 14 lbs .) Market Price.

English or Perennial Rye Grass (Lolium Perenne). A nutritious permanent grass for meadows and pasture, or for mixing with other grasses for lawns. Does well on sloping banks, as its roots are fibrous and mat-like. Is especially adapted for pastures, as it will endure close cropping, and is one of strong, quick and successive aftergrowth. It produces an abundance of foliage which remains bright and green throughout the season, and for this reason is also much used for lawn grass mixtures. It is also well adapted for permanent meadows, and yields large quantities of very nutritious hay, which is well liked by all kinds of stock. Does well on almost any land, but prefers rich or moist soil, such as will produce a good corn crop. Should be sown in the Spring in quantities of $11 / 2$ to 2 bushels per acre. Per bushel ( 24 lbs .) Market Price.

Red or Creeping Fescue (Festuca Rubra). A partly creeping, partly tuft-forming bottom grass, with sparse, narrow blades, useful for both grazing and hay-making purposes. It thrives on all soils, even on dry sandy bottoms, and forms a rather thickly covered turf, leaving very little room for weeds to come through. It is one of the earliest grasses, and comes to the front at a time when young fodder is most looked for. It is useful in small proportion in mixtures for permanent pastures on heavy soils. Its dark-green narrow blades make it useful grass for lawns under shade. Per bushel ( 12 lbs .) Market Price.

Rhode Island Bent Grass (Agrostis Tenuis). A creeping variety, but more tuft-forming than the Creeping Bent, and not quite so productive in fertile stems and foliage. Answers very well in lighter soils, but, unlike the Creeping Bent, it has a tendency to get hard and strawy, and when in this condition is not relished by cattle. It should be cut just before or during bloom. Sow 4 bushels per acre. Per bushel ( 12 lbs.) Market Price.

Sheep's Fescue (Festuca Ovina). A densely tuft-forming perennial grass, deep-rooted and growing 20 to 25 inches high, with very little small bottom and stalk-forming foliage. Grows well on both medium and light sandy soils, having a preference for the latter. It is of medium maturity, but secondary only in regard to yield and nutritive value. It thrives in soils too light, or in want of sufficient rainfall for other grasses to make a permanent pasture, and is extremely well adapted for sheep grazing, hence, its name. It should be borne in mind, however, that Sheep's Fescue grows hard and strawy very soon, and for best results should be cut just before or when the plants are in bloom. Per bushel ( 14 lbs .) Market Price.

Sudan Grass. This recently introduced grass belongs to the Sorghum family, and, according to the reports of the United States Department of Agriculture, is a very valuable grass for hay, especially in sections subject to drought, making good yields nearly everywhere; it grows 4 to 9 feet high, according to cultivation, yielding 2 to 5 tons of excellent hay per acre, with as high as 9 tons under irrigation; should not be sown until the soil has become warm, about corn-planting time or a little earlier. Sow broadcast at the rate of 25 pounds to the acre. Per bushel ( 35 lbs .) Market Price.

## MINGLE'S LAWN GRASS SEEDS

Mingle's Finest Velvet Lawn Grass. The making and keeping of a lawn depends largely upon the thorough preparation of the soil before the seed is sown, as a good soil foundation is one of the essentials. The soil should be well drained and the top soil should be worked to a depth of 4 to 6 inches and none of the sub-soil brought to the surface. Work it thoroughly with a fine steel rake or fine-toothed harrow, crossing and recrossing to obtain as fine a tilth as possible. After sowing gently rake seed in, following with roller, in order to compact the soil around the seeds to promote better germination.

If grading is necessary to secure an even surface, first remove and afterwards replace the top soil after the grading is completed. Tree and shrub planting, and laying out flower beds, should be done first. Lawns properly cared for, well fertilized and kept closely mowed, will improve year after year. Weeds should be removed as far as practicable, before sowing. Lawn grass, to produce a succession of verdure, must naturally consist of a mixture of several grasses, as some are more luxuriant in the Spring, others in Summer, and others again in Autumn. A proper combination of these various sorts is required to create and maintain a perfect, carpet-like lawn, and such is Mingle's Velvet Lawn Grass Mixture.

Sow 1 quart of seed for space $10 \times 30$ feet. Four to five bushels are required for one acre.
Pt., 20c.; qt., 35c.; 2 qts., 60c.; 4 qts., $\$ 1.00 ;$ pk., $\$ 1.75$; bushel (20 lbs.), $\$ 6.50$.

Fairmount Park Lawn Seed. A mixture meeting the requirements of those desiring a moderately priced grass seed. 20 lbs. per bushel.

Pt., 15c.; qt., 25c.; 2 qts., 45c.; 4 qts., 75c.; pk., $\boldsymbol{F}_{1} \$ 1.50$; bushel, $\$ 5.50$.

Shady Lawn Grass. On many lawns are bare spots under the shade trees. Such spots are frequently sour, perhaps covered with a green scum or moss. In such cases apply hydrated lime, which is powdered fine, at the rate of one bushel per thousand square feet, removing all moss or scum first and then loosening the soil in same manner as already prescribed for regular lawn making. Our mixture of grass seed for shaded spots is one best adapted to the requirements of much shaded lawns and will grow perfectly where ordinary grass mixtures would fail. Sowing instructions same as for Velvet Lawn Grass.

Pt., 20c.; qt., 35c.; 2 qts., 65c.; 4 qts., $\$ 1.25$; pk., $\$ 2.25$; bushel ( 20 lbs.), $\$ 8.00$.

Golf or Putting Greens Mixture. Our mixture of this grass is giving the best of satisfaction, being composed in proper proportions of the hardy and dense growing kinds best adapted for the purpose, standing heat and drought well and of deep rooting varieties which stand the wear and tear.

Pt., 30c.; qt., 50c.; 2 qts., 90c.; 4 qts., $\$ 1.75$; pk., $\$ 3.25$; bushel (20 lbs.), $\$ 12.00$.

Terrace or Embankment Grass. Ordinary lawn grass will not hold the soil on terraces and embankments, which require a thick turf, composed of varieties which make strong roots to take hold of the soil and prevent washing by heavy rains. Our Terrace Grass is a carefully prepared combination of such grasses as will fill the requirements by making a quick growth of grass which will form a strong mat and present a good appearance. It will grow well anywhere, but it is best to enrich the soil, in order to provide nourishment to the young roots and give a vigorous start to their growth.

Qt., 35c.; 2 qts., 60c.; 4 qts., $\$ 1.00$; pk., $\$ 1.75$; bushel (20 lbs.) $\$ 6.50$.

Green Grass. This is the grass "par excellence" for lawns, making a fine close surface of dark green velvety color. It is very sensitive to good treatment, and will in most cases drive out the other grasses and take possession of the soil. Should be sown not less than four bushels per acre. Per bushel ( $\mathbf{1 5} \mathrm{lbs}$. ) Market Price.

White Clover. Excellent for use on lawns; forms a close herbage and remains green throughout the season. We furnish the choicest grade of seed. $1 / 4 \mathrm{lb} ., 25 \mathrm{c} . ; 1 / 2 \mathrm{lb} ., 45 \mathrm{c} . ; \mathrm{lb} ., 85 \mathrm{c}$.; 5 lbs., \$3.50.

Seashore Lawn Grass. A rich, green lawn is especially desirable at the seashore, but unless the right mixture of grasses and clover are used the result will be disappointing. Our Seashore Lawn Grass is composed of strong-rooted varieties which quickly produce a good turf. In preparing the land it should first be top-dressed with about four inches of good soil, as grass will not grow well in sand, but the seeds will quickly germinate in the top-soil and make strong roots, which reach down into the sand for moisture. In order to keep the seaside lawn in good condition it should be watered liberally every evening, and also have an occasional application of pure Bone Meal in order to keep up a vigorous growth. Qt., 35c.; 2 qts., 60c.; 4 qts., $\$ 1.00 ;$ pk., $\$ 1.75$; bushel ( 20 lbs.), $\$ 6.50$.

Pasture Grass Seed (for permanent pastures). Having given our attention to grasses for this purpose for many years, and after practical results and experience, we have succeeded in creating a mixture which we can highly recommend.

If there is any land you wish to set in permanent pasture, we can supply you with a mixture of any description required or a special mixture admirably suited, for this purpose at a very reasonable cost. We are headquarters for all kinds of grass seeds and can save you money on your purchases. Of the ingredients in it, the Timothy and the Clovers come right along and give some feed the year of sowing and a good deal of it the next year, while it isn't till that year that the Blue Grass begins to show. But where the Red Clover begins to disappear and the Timothy gets thin the Blue Grass is just setting up in business and the other grasses are not missed. And when established the Blue Grass is a stayer, and it and the White Clover, which also sticks, makes a combination that is all right.

Sow 2 to 3 bushels per acre. Per bushel ( 20 lbs.) Market Price.

Hardwood Ashes. This is also a splendid fertilizer for the lawn and garden, containing all of the fertilizing elements except nitrogen. If used on the lawn at the rate of a ton or more per acre as a first application, and an annual dressing of three hundred pounds afterwards, will insure a thrifty growth of dark color, and freedom from weeds.
Price, 25 lbs., 75c.; 50 lbs., $\$ 1.35 ; 100$ lbs., $\$ 2.50$.

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## ILLUSTRATED AND DESCRIPTIVE CATALOGUE

OF

# Vegetable Seeds 

## WITH GENERAL DIRECTIONS FOR CULTIVATION

## ASPARAGUS

Culture-Soak the seed twenty-four hours in warm water, and sow in drills, one foot apart. When the plants are well up, thin to three or four inches in the row, and give frequent and thorough cultivation during the summer. The second season prepare a bed by deep spading or trenching, working in a large quantity of wellrotted manure. Dig trenches four feet apart and twelve to sixteen inches deep, and spade in at least four inches of wellrotted manure in the bottom. Set the plants in the trench eighteen inches apart, covering them with about two inches of fine soil. After the plants are up, gradually fill up the trenches, and give frequent and thorough cultivation. The second season, early in the spring, spade in a heavy dressing of manure and about two quarts of salt to the square rod. Cultivate well. The next season it may be cut for the table two or three times, taking care to cut all as fast as it appears. After the final cutting, spade in a liberal dressing of fine manure and sow one quart of salt to the square rod. The next season, and ever after that, the bed should give a full crop, but should be annually manured after the last cutting and well cultivated through the remainder of the summer. The tops should not be cut until dead ripe.


Washington Rust-Resistant. A new variety developed by the U. S. Department of Agriculture. It produces abundant crops of large, tender stalks and is practically immune from "rust" and other Asparagus diseases. Without doubt, the finest strain of Asparagus now available. Seed, pkt., 15c.; oz., 65c.; $1 / 4 \mathrm{lb}$., $\$ 2.25$; lb., $\$ 8.00$.
Giant Argenteuil. This sort is one of the largest and most extensively used green varieties. Shoots bright green, sometimes tinged with purple at the top; very tender and of the best quality. Pkt., 10c.; oz., 15c.; $1 / 41 \mathrm{lb}$., 30c.; 1b., $\$ 1.00$.

Barr's Mammoth. A favorite with the market gardeners. Shoots white; very large, tender, quick growing, and thick to the top. This is the large white variety generally used in canning. Pkt., 10c.; oz., 15c.; 1/4 lb., 30c.; 1b., \$1.00.
Conover's Colossal. A popular French Asparagus of great merit. It is very early, vigorous and prolific, growing large, delicious stalks. It is less liable to rust, has large dark green or purple tips, making it one of the best and most attractive asparagus grown. Pkt., 10c.; oz., 15c.; 1/4 lb., 30c.; 1b., \$1.00.
Palmetto. A very early maturing and prolific variety, producing an abundance of large, deep green shoots of best quality. Its uniformly large stalks remain tender longer than any other variety, being in prime condition for several days after coming through the ground. Is disease-resistant; a heavy and sure cropper. Pkt., 10c.; oz., 15c.; $1 / 4$ lb., 30c.; lb., $\$ 1.00$.

## ASPARAGUS ROOTS

We can supply strong two-year-old roots of the following varieties:

## Early Giant French Argenteuil, $\$ 1.25$ per $100 ; \$ 8.00$ per 1000.

Barr's Mammoth, $\$ 1.25$ per $100 ; \$ 8.00$ per 1000.
Conover's Colossal, $\$ 1.25$ per 100; $\$ 8.00$ per 1000.
Palmetto, $\$ 1.25$ per $100 ; \$ 8.00$ per 1000 .
If wanted by Parcel Post, add $\mathbf{1 0}$ cts. per 100 to cover cost of postage and packing.

## Asparagus Bunchers-See Page 75 <br> " Tape ". " 75 <br> " Knives "، " 75

## ARTICHOKE

The seed we offer is that of the true artichoke which is an extensively used vegetable in Europe. In it the edible portion is the thickened scales at the base of the flower-heads or buds. The plant is very different from what is known in America as Artichoke or Jerusalem Artichoke, in which the edible portion is the tuber.
In February or March sow and transplant in hotbed so as to give plenty of room until danger of frost is over. Then set in very rich, well-drained soil in rows four feet apart and two feet apart in the row. The plants can be raised in seed beds out of doors, but in that case will not be likely to produce heads the first year. Late in the fall cut off the old tops and thoroughly protect the crowns with leaves or straw to prevent severe freezing.
The second year thin the starting shoots to three of the best, which will commence to form heads about July 1st. The plants may also be blanched like cardoons. This is done by cutting back the stems close to the ground in July, the rapidly growing shoots which then start up may be tied and blanched like celery. As artichoke plants do not yield satisfactorily after three or four years, it is best to start a new plantation as often as once in three years.

Green Globe. The plant of this variety is of medium height with rather deep green leaves. The buds or flower-heads are green, nearly round or somewhat elongated. The scales are rather narrow and spiny, and are moderately fleshy at the base. Pkt., 10c.; oz., 50c.; 1/4 1b., \$1.60; 1b., \$6.00.

> No matter what you may order from the catalogue, you may rest assured of full value for your money. Proven by test, our seeds are best.

## BEANS

Culture-Early beans mature earlier and succeed best in a light, warm, sandy soil, enriched with well rotted manure. Later varieties may be successfully grown in a darker, heavier soil, if rich and mellow. Dwarf beans are earlier and hardier than the pole, and can be planted earlier, but should not be planted until the ground is warm and danger from frost past. Plant shallow early, say 2 to 3 inches deep, and deep late, say 4 to 5 inches deep. For the home garden, where all cultivation is to be by hand, plant in drills 15 to 18 inches apart, and 2 to 3 inches apart in the row, covering from 2 to 5 inches deep, according to the season. For field planting, plant in drills or rows 2 to 3 feet apart, 2 to 4 inches apart in the row. If the ground is dry and irrigation necessary to sprout the beans, irrigate the ground first, planting the seed as soon as the ground is dry enough to prepare for the seed. Never irrigate immediately after planting, as it will crust the ground, preventing the beans from coming through, and often cause them to rot. Beans require very little water. After each irrigation or rain mulch the soil as soon as it is in good working condition. This will conserve the moisture and require less water. Cultivate frequently and shallow, but never when the vines are wet.

## DWARF OR BUSH

## Green Podded Varieties



Giant Stringless Green Pod. An exceedingly productive and very handsome sort. The plants are large, vigorous and spreading. The pods are large and nearly round, and of medium green color. They mature a few days later than those of Stringless Green Pod, average about one-fourth inch longer and more nearly straight. The quality is very good for snaps for home use. The variety is suitable also for the market. Seed long, slender, yellow. Pkt. 10 c .; pt., 30 c .; qt., 55 c .; 4 qts., \$1.85; pk., \$3.45.


## Stringless Green Pod Beans

Burpee's Stringless Green Pod. One of the finest extra early beans in cultivation. It combines unusual hardiness, extreme earliness and wonderful productiveness. Pods of handsome appearance and finest quality. By repeated plantings pods may be had in succession from Spring until killed by heavy frost in the Fall. The pods are rich green, round, straight, meaty, broad, tender, brittle, and of finest flavor. Always entirely stringless, even when fully matured. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., \$1.85; pk., \$3.45.

Bountiful. This excellent dwarf, green podded sort is similar in appearance to Early Yellow Kidney Six Weeks, but is of much better quality. The vines are vigorous and productive. The pods are very long, six to seven inches, straight, broad, flat, light green, of handsome appearance and absolutely stringless for snaps. They are tender and brittle much longer than most sorts. The pods are longer, broader and have much longer tips than those of Long Yellow Six Weeks. Seed medium sized, kidney shaped, light yellow with brownish circle about eye. Bountiful is a most desirable early sort for snaps for the home garden. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., $\$ 1.85$; pk., $\$ 3.50$.

Black Valentine. A very hardy and productive green podded sort with strong, vigorous vines. The pods are nearly round or slightly flattened but very handsome, are much longer, straighter and less fleshy than Red Valentine, the plant a little more spreading, and in season a little later. A large crop can be depended on and the product is very attractive on the market. It is very extensively used for shipping. The pods are medium dark green and about six inches long. Seed small to medium sized, black, oblong, slightly flattened. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., $\$ 1.75$; pk., $\$ 3.30$.

Full Measure. Fine stringless medium green pod of high quality. The pods are straight, 6 inches long, very fleshy, almost round, crease-backed, have no neck, showing depressions around the Bean, and are tender. It is a prolific sort, the heavy pods producing throughout a long season. The season is about the same as Burpee's Stringless, although more productive. Pkt., 10c.; pt., 30c.; qt., $55 \mathrm{c} . ; 4$ qts., $\$ 2.00$; pk., $\$ 3.60$.

Dwarf Horticultural. One of the best dwarf sorts for green shell beans for the home garden and market and can be used early as a green podded snap bean. The plants are very productive, compact and upright, with large leaves. The mature pods are about five to five and one-half inches in length, broad and thick, curved, with splashes of bright red on a yellowish ground. They become fit for use as green shelled beans early and in this condition the beans are very large, easily shelled and are about equal to the Lima in quality. Seed large, oval, plump, pale buff splashed with deep red. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., $\$ 2.00 ;$ pk., $\$ 3.60$.

Refugee or Thousand to One. A standard very productive sort, highly esteemed for late planting for snaps and very extensively used for shipping, canning and pickling. Sometimes called Late Refugee, Round Pod Refugee and Improved Refugee. The plants are very large, spreading, exceedingly hardy, with many small, smooth light green leaves. The mature pods are about five and one-fourth inches long, cylindrical, slightly curved, medium green when in condition for use as snaps but as they mature becoming light yellow, sometimes splashed with purple. Seed long, cylindrical, light drab, thickly dotted and splashed with purple. Pkt., 10c.; pt., 30c.; qt.,
55c.; 4 qts., $\$ 2.00$; pk., $\$ 3.45$.

## Wax Podded Varieties



Sure Crop Stringless Wax. Very prolific and produces pods of the finest quality. The pods are almost round, slightly curved; measure about 7 inches long by $1 / 2$ inch wide, and are always stringless; the meat is very thick. Pkt., 10c.; pt., 30c.; qt., 55 c .; 4 qts., $\$ 2.00 ; \mathrm{pk}$., $\$ 3.45$.

Pencil Pod Wax. This very handsome black wax sort is medium early, fairly hardy and productive. It is one of the very best sorts for home use and for near markets where highest quality is desired. The plants are strong growing with roughened leaves. The pods are long, five and one-half to six inches, straight, round, fleshy and of a bright yellow color. They are tender, absolutely stringless and are produced through a long season. Seed long, round, medium-sized, solid black. Pkt., 10c.; pt., $30 \mathrm{c} . ; \mathrm{qt}$., $55 \mathrm{c} . ; 4$ qts., $\$ 2.00 ; \mathrm{pk}$., $\$ 3.45$.

Currie's Rust Proof Wax. Is the earliest to mature of either the green or wax beans. It is ready for market 25 days from date of planting. Its beautiful, pure golden, long, flat pods are of extra fine quality and are borne in abundance and attract the admiration of both the planter and the consumer. Entirely free from rust or blight. Pkt., 10c.; pt., 30c.; qt., $55 \mathrm{c} . ; 4$ qts., \$2.00; pk., \$3.45.

Webber Wax. A new wax bean of distinct character. The vine is strong, holding pods well up, good bearer, yellow seed, round in shape, very meaty. This bean merits a trial. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., $\$ 2.00$; pk., $\$ 3.45$.

Hodson Wax. A very sturdy grower, prolific; free from rust and blight. Vigorous plants are loaded with long handsome, straight pods, averaging 7 inches in length, color of a clear, light yellow, when picked young they are stringless. Pkt., 10c.; pt., 30c.; qt., $55 \mathrm{c} . ; 4$ qts., $\$ 2.00$; pk., $\$ 3.45$.

Brittle Wax or Round Pod Kidney Wax. A strong growing midseason variety, vigorously productive, having round pods about six inches long, slightly curved, light yellow, wax-like, stringless and of the very best quality. Pkt. 10c.; pt., 35c.; qt., 70c.; 4 qts., $\$ 2.15$; pk., $\$ 4.00$.


Improved Golden Wax Beans

Improved Rust Proof Golden Wax Bean-Thirty-five days-This bean has long been and still continues the standard wax variety for general use, and where many varieties have been introduced claiming to be superior in some respects and aiming to replace it, they have all sooner or later been forced to the rear as not possessing as many good qualities in as high degree. Vines medium size, erect, moderately spreading, hardy and productive, with small, smooth leaves, and small white blossoms; pods are long, nearly straight, broad, flat, golden yellow, very fleshy and wax-like, with short fleshy, green point, cooking quickly as snaps, shelling well when green, and of the highest quality in both conditions. Beans medium size, oval, white, more or less covered with two shades of purple-red. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., \$2.00; pk., \$3.45.

Davis Wax. This is also called Davis White Kidney Wax. It is a well-known market sort, much used for shipping. The plants are very hardy and productive and the variety is very desirable where a handsome wax-podded, white seeded intermediate sort is wanted. The plants are very vigorous. The pods are remarkably long, about six inches, sometimes longer. They are handsome, light yellow, straight, very attractive and when young are crisp and tender. The dry beans are excellent for baking. Seed medium large, kidney shaped, clear white. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., $\$ 2.00$; pk., $\$ 3.60$.
Wardwell's Kidney Wax. The vines of this variety are very large, strong growing, but are peculiarly liable to blight, but when healthy, yield a large crop of long, nearly straight, handsome, very white and wax-like pods. They are of good quality and on this account, as well as their beauty of form and color, are easily sold. They ripen about the same time as the Golden Wax. The dry beans are large, kidney-shaped, white with dark markings about the eye. Market gardeners find this a profitable variety owing to the large size and handsome color of the pods. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., $\$ 2.00$; pk., $\$ 3.60$.

## Dwarf Beans for Shelling (Winter use)

Dwarf Horticultural or Cherry Bean. A crop of these beans has never failed to pay. This is a broad, long, flat, meaty bean, very productive, delicious flavor. It also makes a fine dried bean. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.

White Marrowfat. Extensively grown for sale as a dry Bean for winter use. Pkt., 10c.; pt., 20c.; qt., 35c.; 4 qts., $\$ 1.25$; pk., \$2.40.
White Kidney or Royal Dwarf. A superior kind for baking. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., $\$ 1.30$; pk., $\$ 2.40$.

Boston Pea Bean ( Navy ). An excellent variety, and of very productive habit. Seeds are small, very short, almost round, and solid white. Pkt., 10c.; pt., 20c.; qt., 35c.; 4 qts., $\$ 1.25$; pk., \$2.25.
Red Kidney. A standard field Bean, grown almost exclusively for the dry Beans, which are long, oval shape, and purplishbrown in color. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., $\$ 1.50$; pk., \$2.40.

## Pole or Running

Culture-These are even more sensitive to cold and wet, as well as to drought and hot winds, than the dwarf varieties. After settled warm weather, set poles four to eight feet long in rows north and south four feet apart, the poles being three feet apart in the row, and set leaning to the north at an angle of 35 degrees. Set in this way, the vines climb better, bear earlier, and the pods are straighter and more easily seen. Around each hill plant five to eight beans, two inches deep. When well started, thin to four plants, and start any that fail to climb, around the pole in the same way as the others, for they will not grow well otherwise.

Kentucky Wonder or Old Homestead. We believe this variety is the most practically useful of the green podded pole beans suitable for use as snaps. It is an early, very prolific sort, with showy pods which are of most excellent quality. The vines are vigorous, climbing well and very productive, bearing pods in large clusters. The pods are medium light green, very long, often reaching nine or ten inches, curved and twisted, nearly round and very crisp when young, becoming very irregular and spongy as the beans ripen. Seed long, oval, slightly flattened, dun colored. One of the very best early pole snap beans for the home garden or market. The quality of our stock is unsurpassed. Pkt., 10c.; pt., 35c.; qt., 65c.; 4 qts., $\$ 2.00 ;$ pk., $\$ 3.60$.

Kentucky Wonder Wax. The Pride of the Garden. Its popularity as a home garden bean soon reached nation-wide proportions, and today is offered by nearly every seedsman in the United States. It commences to bear when scarcely higher than the average bush variety, and keeps on producing until killed by a frost. It is a rampant grower, one plant filling a pole with a mass of vines densely loaded with luscious beans. They are firm, entirely stringless, and when cooked, deliciously rich and buttery. The seed is brown, closely resembling that of the Kentucky Wonder. Plant from April to August. Pkt., 10c; pt., 35c.; qt., 65 c .; 4 qts., $\$ 2.00$; pk., $\$ 3.60$.

Early Golden Cluster Wax. A well-known early and very attractive sort. It is one of the best wax-podded snap pole beans. The vines are large, strong growing, vigorous and hardy, with large, light green crimped leaves. The pods are six to eight inches long, borne in abundant clusters, each containing from three to six pods varying in color from golden yellow to creamy white. The pods are very broad, thick and fleshy. They are of very good quality and stay in condition for use a long time. Seed medium sized, flattened, oval, dull white. Pkt., 10c.; pt., 35c.; qt., 65c.; 4 qts., $\$ 2.00$; pk., $\$ 3.60$.
Lazy Wife. One of the best pole beans for snaps. The large, fleshy pods are five to six inches long and entirely stringless when young, have a rich buttery flavor. When nearly matured they are delicious when shelled and cooked while yet green. The dry beans, too, are unsurpassed by any. The seed is white, nearly round, and somewhat larger than a pea. Pkt., 10c.; pt., 35c.; qt., 65 c .; 4 qts., $\$ 2.00$; pk., $\$ 3.60$.

Horticultural Pole. Also referred to as Romaine, Cranberry, Italian and Cornfield. Its large succulent tender pods make it a desirable bean for the table. It is also one of the most desirable green shelled beans for succotash and excellent as a dry bean. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., $\$ 2.00$; pk., $\$ 3.45$.

The Scarlet Runner. An old-time favorite that heretofore has been planted chiefly for ornamental purposes. But few people know that the Scarlet Runner may be planted May 1st and in six weeks attain a height of eight feet, and rapidly cover an arbor with vines twenty feet long.

The Scarlet Runner planted May 1st will bear edible pods from July 1st until late Fall. When the vines mildew trim them back to within a foot of the ground. The roots will survive the Winter, and by the following May will have the arbor again covered and bear green beans until August when the vines again mildew. Cut back as before and with proper irrigation they will bear another crop in October, and so on two crops a year indefinitely.

Be sure to build a permanent arbor, and plant some Scarlet Runner during April. Pkt., 10c.; pt., 35c.; qt., 65c.; 4 qts., \$2.00; pk., \$3.45.

We pay postage on packets. Add 5c. per pint and 10c. per quart for Beans when ordered by mail, to cover cost of parcel post.

## BUSH LIMA BEANS

The dwarf lima class cannot be recommended too highly. The beans can be grown and gathered much more easily than the pole limas, as the vines require no support. They can also be grown closer together than those of any pole variety. Dwarf limas are fully equal in quality to pole limas and as a rule are earlier maturing.

Culture. Limas require a longer season for maturing than other garden beans. Do not plant till the ground is dry, weather warm and danger of frost is over. If possible select rich, light soil. Plant in drills two to three feet apart, dropping the beans three to four inches apart, and covering one and one-half to two inches deep. If planted in hills, make the hills two to three feet apart one way and two to two and one-half feet the other and plant four to six beans in a hill. Hoe often but only when the leaves are dry.

Burpee's Improved Bush Lima. A sort distinct from Burpee's Bush Lima in that it is about ten to fifteen days earlier, bears much larger and thicker pods, and larger greenish-white beans than Burpee's Bush Lima. The plants are vigorous, white heavy foliage and are about 2 feet high and of upright growth. The yield is about one-third more, and the beans of a luscious flavor. Pkt., 10c.; pt.,40c.; qt., 75c.; 4 qts., $\$ 2.65$; pk., $\$ 4.80$.

Burpee's Bush Lima. Vine about 20 inches high, erect and vigorous in growth; very prolific in large green pods, filled with large white beans. Pkt.; 10c.; pt., 40c.; qt., 75c.; 4 qts., $\$ 2.65$; pk., \$4.80.

Dreer's Wonder Bush Lima. This variety of Bush Lima Bean is very desirable on account of earliness, productiveness and its fixed habit of growing in the dwarf or bush form. The plants are of strong, upright growth, and are completely covered with large pods, many of which contain four beans, which are fully as large as the pole limas. The beans are flat in shape and of excellent quality. Pkt., 10c.; pt., 35c.; qt., $65 \mathrm{c} . ; 4$ qts., $\$ 2.10$; pk., $\$ 4.00$.


Fordhook Bush Lima
Fordhook Bush Lima. The pods, borne in clusters of from four to eight, are
 much larger, and about six days earlier than Dreer's Bush Lima, which latter they otherwise resemble.

The green beans are large, and even when of full size, when cooked, are not dry, but tender, sweet and luscious.

The bushes are decidedly erect in growth, with side branches well held up, and holding the pods from the ground, and thus protecting them from rust. A habit quite distinct from that of the low-growing growth of Dreer's Bush Lima. The foliage is large, like that of the Pole Lima. The leaves are large, smooth and of a deep, rich green color.

The Fordhook is a one-third heavier cropper than Dreer's, and is destined to supersede it in every way. Pkt., 10c.; pt., 40 c .; qt., 75 c .; 4 qts., $\$ 2.75$; pk., $\$ 5.00$.

## POLE LIMA BEANS

Early Leviathan. The plant is strong and takes to the poles more readily than any other sort. It is fully a week earlier than any other pole variety, therefore can be grown successfully where other sorts would be caught by frosts of early autumn. In Northern States, or where by reason of continued cool nights, the growth is less rapid, Leviathan will be found admirably adapted. Moreover, it is a prodigious cropper, producing its pods in large clusters from base to top of pole, frequently from 5 to 10 together. These are well filled with large, fleshy Beans of excellent quality, delicate, pale green in color, and possessing in a superlative degree that rich, buttery flavor so highly esteemed by all. Pkt., 10c.; pt., 35c.; qt., 65c.; 4 qts., $\$ 2.25$; pk., $\$ 3.75$.
Improved Extra Jersey Lima. Ninety days-Very superior quality, white seed much larger than the ordinary Lima, of greenish tinge; tender and sweet. Pkt., 10c.; pt., 35c.; qt., 65 c .; 4 qts., $\$ 2.25$; pk., $\$ 3.75$.

Challenger, or Dreer's Improved. Also known as Potato Lima. Vine very stout, vigorous and productive. The pods are much thicker than those of other limas, with an average of four thick beans set one against the other in the pod so closely that the ends of the beans are indented. It is early, continues to produce large clusters until frost. It will shell out more than the flat-podded sorts. Pkt., 10c.; pt., 35c.; qt., 65 c .; 4 qts., $\$ 2.25$; pk., $\$ 3.75$.

Shotwell's Improved Thick Pole Lima. A well-known favorite introduced from New Jersey. Beans thick and large. A decided improvement on Dreer's Improved Lima in quality, earliness and productiveness. Highly recommended by all who have tried it. Pkt., 10c.; pt., 35c.; qt., 65c.; 4 qts., \$2.25; pk., \$3.75.

Salem County Improved Large Lima. Ninety days. A favorite table variety, very prolific; pods borne in clusters, with five or six large beans to the pod. Far superior to other Pole Limas. Ripens early and bears until frost. Pkt., 10c.; pt., 35c.; qt., 65c.; 4 qts., $\$ 2.25$; pk., $\$ 3.75$.
Ford's Mammoth Extra Large Lima Beans. Its pods are large in size, containing from 3 to 8 Beans. They are unsurpassed in quality and productiveness. Pkt., 10c.; pt., 35c.; qt., 65c.; 4 qts., \$2.25; pk., \$3.75.


King of the Garden Lima. The vines of this standard pole lima are very vigorous and productive. The pods are medium dark green, very large, five to six inches long, broad, flat, filled with four or five very large white beans of finest quality. On account of its large pods it is a favorite with market gardeners. It will come into bearing earlier and make larger pods if not more than two vines are left to grow on a pole. Seed very large, ovoid flat, white, with slight greenish tinge. Pkt., 10c.; pt., 35c.; qt., $65 \mathrm{c} . ; 4$ qts., $\$ 2.25$; pk., $\$ 3.75$.

## NITROGEN GATHERING BAGTERIA

If you want your bean patch to yield earlier and better, inoculate the seed before planting with MULFORD CULTURE. It encourages vigorous vines, well filled pods and makes it possible for the plants to withstand drought and disease better.

MULFORD CULTURE: 35c., per trial bottle; 75c., $1 / 4$ acre bottle.

When ordering be sure and specify wanted for Garden or Lima Beans, as desired, as each leguminous crop requires a separate culture.

## BEETS

Culture. All the varieties succeed best on a deep, rich, sandy loam. For early beets, sow as soon as the ground will admit, in drills fourteen inches apart, and thin to six inches in the row. For winter, sow about the middle of spring. Soak the seed twenty-four hours in luke-warm water before planting, and sow in freshly prepared ground.

Bassano Extra Early. Top large and light green. Root turnip-shaped, pink zoned with white. Very fast grower, of good quality, sweet and tender. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{1 b} .$, 35c.; lb., \$1.00.

Bastians Half Long Blood. Sixty days. One of the very best, unsurpassed for its winter keeping qualities. Pkt., 10c.; oz., 15c.; $1 / 4$ 1b., 35c.; 1b., \$1.00.


Crimson Globe Beet
"New Crimson Globe" Beet. This is one of the best Bunch-
ing Beets yet introduced. A handsome variety of medium size,
almost globe shape, and entirely free from rootlets; a grand
second early or main crop sort. The roots are of medium size.
Beets average 10 inches in circumference, very handsome in
shape, being a little deeper than round, with a remarkably smooth
surface. The foliage is small and of a rich bronze purple, borne
on slender stems which occupy but a small portion of the root.
Flesh is a rich blood red, slightly zoned or ringed in a most
beautiful manner, making it very attractive in appearance;
never stringy. Pkt., 10c.; oz., 15c.; $1 / \mathbf{1 b} \mathbf{1 b} . \mathbf{3 5 c}$.; lb., $\$ 1.10$.
Detroit Dark Red Beet. A splendid Beet of a dark red color, for home or market. By far the best for canning, on account of its beauty. Small, upright tops and perfectly small roots. Flesh zoned with lighter and darker bands; tender and sweet. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 35 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.10$.

Early Blood Turnip. Tops small, roots blood red, turnip shaped and very tender. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., \mathbf{3 5 c}$.; 1b., \$1.10.

Eclipse. A globular crimson sort of very rapid growth. Bright red in color, and of fine flavor. A great improvement on its parent, the Egyptian. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$.; 1b., \$1.00.

Early Flat Egyptian Blood Turnip. Forty days. This matures quicker than any other sort. Roots of fine form, medium size, smooth and dark in color, flesh dark red, fine grained, crisp and tender. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$.; 1b., \$1.00.

Improved Long Dark Blood. Sixty-two days. The best winter variety, but apt to be tough when sown too early. Pkt., 10c.; oz., 15c.; $1 / 4$ lb., 35c.; lb., \$1.00.


## Crosby's Egyptian Beet

Crosby's Improved Extra Early Egyptian Beet. An improvement on Extra Early Egyptian, being as early, but of more desirable shape, color and quality. It is very sweet and tender; a most valuable sort for early market, as it is ready before any other Beet of equal quality. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$., 35c.; 1b., \$1.10.

## Sugar and Stock Beets

Culture. The Sugar and Mangel Wurzel varieties are grown for feeding stock and should be sown from April to June in drills two feet apart, and afterwards thinned out to stand one foot apart in the rows; keep them well cultivated and you will have an abundant crop.

Giant Half Sugar. The best for feeding stock, as it contains more nutritive value, Grows half out of the ground. Color of skin, pink above the ground, white below. Oz., 10c.; $1 / 4 \mathrm{lb}$., 20c.; lb. 60c.; 10 lbs., $\$ 5.50$.

## Giant Mammoth Long

Red Mangel. Our stock is a great improvement on the old variety. The roots are very large, uniformly straight and well formed. Color deep red, roots solid, tops small. Roots attain a large size. We received several reports last season of Mangels weighing 20 to 23 pounds each. Produces an immense bulk and tonnage. Oz., 10c.; 1/4 1b., 20c.; 1b., 60c.; 10 lbs., $\$ 5.50$.

Golden Tankard. Large, round, orange-colored variety, of excellent quality, which keeps better than the Long Red, producing better crops on shallow soil. Oz., 10c.; 1/41b., 20c.; lb., 60c.; 10 lbs., $\$ 5.50$.

Red Globe Mangel Wurzel. Similar to Yellow Globe, except in color, which is light red or pink. Oz., 10c.; $1 / 41 \mathrm{lb}$., 20c.; 1b. 60c.; 10 lbs., $\$ 5.50$.


Long Red Mangel Wurzel Beet

Yellow Eckendorf. A handsome variety and heavy cropper; grows almost on surface of the ground, in shape broad with rounding top, flat bottom, good flavor, stock greatly relish this mangel. Oz., 10c.; 1/4 1b., 20c.; 1b., 60c.; 10 1bs., $\$ 5.50$.

Imperial White Sugar. Seventy days. A greatly improved variety of the White Silesian. Oz., 10c.; 1/41b., 20c.; 1b., 60c.; 10 lbs., $\$ 5.50$.

## Swiss Chard or Foliage Beet



## Swiss Chard Lucullus

Culture. Swiss Chard is a beet grown for its leaves. The mid-rib when boiled makes delicious greens, or the leaves may be boiled and served as spinach. Sown in the spring the leaves are soon ready to eat and will continue to grow all through the summer and fall. If given a little protection it will survive the winter and make excellent greens early in the spring.

## Swiss Chard

 Lucullus. This delicious and useful vegetable should be in every garden and on every market stall. It is really two distinct vegetables; first the leafy part of the foliage is cooked and served the same as spinach, while the stalks are cooked and served with drawn butter like tender asparagus. It grows about $21 / 2$ feet high, the stalks are thick and broad like rhubarb, the leaves are much longer than those of the regular Swiss Chard, they are heavily crumpled like Savoy spinach. Crisp and tender, pleasing flavor. Pkt., 10c.; oz., 15c.; 1/4 1b., 35c.; 1b., \$1.10.
## BRUSSELS SPROUTS



Culture. The culture is the same as Cabbage, which plant it resembles, the edible part being the numerous small heads or sprouts formed on the stalk at each leaf joint. Leaves should be broken down in the fall to give the little heads more room to grow. They are considered more tender and delicious than Cabbage. Sow seed about May 15th.

## Long Island Improved.

 This is a very desirable vegetable, though very little known in this country. It grows 2 or 3 feet high and produces from the sides of the stalk numerous little sprouts somewhat resembling cabbages; they are used for fall and winter greens. It can only be grown to perfection in a good soil and with a long season to complete its growth. The seed should be sown in March or April, in a frame, and the plants transplanted into the open ground and
## Long 1sland Improved

 cultivated as cabbage. The plants should be watered andshaded for a week or ten days to give them a good start. Pkt., 10c.; oz., 25c.; $1 / 4 \mathbf{1 b}$., 85 c .; $\mathbf{1 b} ., \$ 3.00$.

## BROCCOLI

Culture. Broccoli is similar to and culture same as Cauliflower. It is well adapted only to those sections where the season is long, cool and rather moist. It withstands greater extremes of temperature than Caulifower.

Early Large White French. The best variety, large, white, compact heads which remain firm for a long time. Pkt., 10c.; oz., 60c.; 1/4 1b., $\$ 2.00 ; 1 \mathrm{lb} ., \$ 7.50$.

## CABBAGE

Culture. For Cabbages the ground must be highly manured, deeply dug or plowed, and thoroughly worked to insure good full-sized heads. A heavy, moist and fresh loam is most suitable. The early sorts should be sown very early, in hot-beds, hardened off, and transplanted eighteen or twenty-four inches apart, early in the spring. In the South, sow from the middle of September to middle of October, and transplant into cold frames to preserve through winter, setting into open ground as early as possible. In transplanting, they must be set in the ground up to the first leaf no matter how long the stem may be.

The late autumn or winter varieties may be sown in a seed bed, from the middle to the last of spring, and transpianted when about six inches high, three feet apart each way. Shade and water the late sowings in dry weather to get them up. It is important that the plants should stand thinly in the seed-bed, or they will run up weak and slender, and be likely to make long stems. Cultivate frequently throughout the season.


## Early Jersey Wakefield

Early Jersey Wakefield. The most popular pointed head cabbage. Medium size, compact, solid and of excellent quality. The thick, stout leaves and compact habit of this variety makes it the best sort for very early setting. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb}$., 85 c .; lb., $\$ 3.00$.

Early Dwarf Flat Dutch. (Ninety-five days.) Heads of medium size, solid, flat, grows low on stump, and is of good flavor. Pkt., 10c.; oz., 25c.; $1 / 41 \mathrm{~b} ., 85 \mathrm{c}$.; 1b., $\$ 3.00$.

Early Summer Cabbage. In size, form, solidity and earliness this is truly a model Cabbage. It heads just after our Jersey Wakefield. Pkt., 10c.; oz., 25c.; 1/4 1b., 85c.; 1b., $\$ 3.00$.

Copenhagen Market. A solid, round-headed extra early of Danish origin.

Is remarkably short stemmed, with heads of large size, and of excellent quality. The leaves are light green. It is the largest of the early round-headed variety, and admits of very close planting. The crop can be cut at one time, as it matures uniformly. Pkt., 10c.; oz., 40c.; $1 / 41 \mathrm{lb} ., \$ 1.10 ; 1 \mathrm{~b} ., \$ 4.00$.

## CABBAGE-Continued

Charleston Wakefield. From five days to a week later than early Jersey Wakefield. Heads are larger, fully as solid, a little less pointed. An excellent variety to closely follow Early Jersey. Pkt., 10c.; oz., 25c.; 1/4 lb., 85c.; lb., \$3.00.


Early Winnigstadt
Early Winnigstadt-One of the best for general use, being a sure header, and will grow a hard head under circumstances where most sorts would fail. Heads of regular conical shape, very hard and keep well winter and summer. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb}$., 85c.; lb., $\$ 3.00$.

## Second Early

All Seasons. An "all-season" variety, equally good for Fall and Winter as for Summer use. The heads are large, solid, round, flattened on top, and of best quality. Pkt., 10c.; oz., 25c.; 1/4 1b., 85c.; 1b., \$3.00.

Early Succession Cabbage. A wonderful Cabbage for solidity, productiveness and fine, large heads. Matures early, has handsome color and fine quality. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb}$., 85c.; 1b., \$3.00.

Sure Head Cabbage. (Pedigree Stock.) Produces large, round, flattened heads that are all head, with fewer outer leaves; very uniform, firm and weighs from 10 to 15 pounds each. Splendid shipper and of an excellent quality. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb} ., 85 \mathrm{c}$., lb., $\$ 3.00$.

Enkhuizen Glory. An excellent round-headed sort maturing with the Large Wakefield. It remains a long time after heading without bursting. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.; lb., \$3.00.

## Late

All Head Savoy. A fine strain of the beautiful curled leaf variety, and is certainly entitled to a trial. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb}$., 85c.; lb., $\$ 3.00$.

Danish Ball Head Cabbage. (Tall Stem.) This is the most excellent Cabbage, is very solid and out weighs any other Cabbage of equal size. The head is round with flattened top; a good keeper; first-class shipper and sells everywhere. Pkt., 10c.; oz., 30c.; $1 / 4 \mathrm{lb}$., $\$ 1.00$; 1b., $\$ 3.00$.

Mammoth Red Dutch. Is the largest Red Cabbage, and heads very solid and is deep red in color to the very center. No cabbage is better for boiling or slaw, and its beautiful red color specially fits it for pickling. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb}$., 85c.; 1b., \$3.00.


Improved Drumhead Savoy
Improved Drumhead Savoy. The best of the Savoys for general market or home use. It has a short stump, grows to a large size, is compact and solid, and closely approaches the Cauliflower in delicacy and flavor. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb}$., 85c.; lb., \$3.00.


Premium Large Late Flat Dutch
Premium Large Late Flat Dutch. It has long been the favorite sort for cold slaw and sauerkraut. It matures just before severe frost and keeps perfectly over Winter. Pkt., 10c.; oz., 25c.; 1/4 1b., 85c.; 1b., $\$ 3.00$.


Danish Round Head
Danish Round Head. (Short Stem.) Somewhat superior to the Long Stem. Heads are larger and growing close to the ground. Pkt., 10c.; oz., 25c.; 1/4 lb., 85c.; lb., $\$ 3.00$.

## Chinese or Celery Cabbage <br> (Pe-Tsai)

Culture. This exceptionally fine vegetable is a native of China, and possesses striking characteristics which place it in a class by itself.

Grows like Cos-lettuce and when its outer leaves are stripped off shows a picture of Lettuce and Celery combined.

Shredded, it makes the finest slaw, and stripped of its midribs, which are eaten as celery, it makes a fine salad.

It possesses a very mild flavor.
Sow the seed like regular Cabbage. If for early planting sow in hot beds in February; if for later planting sow early in July.

This plant matures 12 to 15 weeks from time of sowing seed, and will not stand frost.


New Pe-Tsai "Paoting"
New Pe-Tsai "Paoting." Big, compact, tender and crisp, an excellent Pe -Tsai. We have found this to be absolutely the best firm-heading variety to grow during the summer months. It will not scald or burn and will, make a head when others fail. It somewhat resembles "Kinshiu" in shape and "Shantung" in character of leaf, color and size, but the head is more compact. lt will produce a head of 15 pounds and will stand long, before bolting to seed. Excellent in quality, crisp,-tender and brittle, with a fine celery flavor. We recommend it either for the market gardener, trucker, or private planter as it is a perfect Chinese Pe-Tsai Cabbage in every respect, not only being of the largest size, but of handsome color and of the finest quality. It is probably the safest variety for an amateur to plant, as it does well at all seasons, and one is almost sure of getting a crop. It is vigorous and free from insects. Pkt., 10c.; oz., 45c.; $1 / 4 \mathrm{lb}$., $\$ 1.50 ; 1 \mathrm{~b} ., \$ 5.50$.

Shantung. A production of Shantung, a province in China. Distinctive flavor, very mild and pleasant. The outside leaves are large, round and light green in color. The heart is snowy white. We recommend this as a most excellent sort for either home garden or market planting. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb}$., 75c.; lb., \$2.50.

## CABBAGE PLANTS

## Ready May-July.

Early Jersey Wakefield, Charleston Wakefield, Winnigstadt, Early Dwarf, Flat Dutch, Succession, Early Summer, All Seasons, Drumhead Savoy, Premium Late Flat Dutch, Improved Drumhead, Savoy, Danish Round Head, Danish Ball Head, Copenhagen Market.

Prices on all varieties: $\mathbf{2 5}$ for 20c.; $\mathbf{1 0 0}$ for $\mathbf{6 0}$ c.; $\mathbf{1 0 0 0}$ for $\mathbf{\$ 5 . 0 0}$.
If wanted by Parcel Post add 10c. per 100, to cover cost of postage and cost of packing.

All plants will be packed in live moss, insuring long shipment. No plants shipped on Saturday.

## CAULIFLOWER

Culture. Sow for early use about middle September, in a bed of rich, clean earth. In about four or five weeks afterwards the plants should be pricked out into another bed, at a distance of four inches from each other each way, these should be encompassed with garden frames, covered with glazed sashes, and board or shutters. The beds must be so secured, and the tops of the beds so covered as to keep out all frosts, giving them light and air every mild day throughout the Winter; transplant in April into a bed of the richest earth in the garden, at a distance of two feet and a half each way. Keep them well hoed, and bring the earth gradually up to the stems. The late variety matures in the Autumn, and is sown and managed similarly to Winter cabbage, but is not so certain to succeed in this climate.


## Early Snow Ball

Early Snow Ball. Our Snow Ball Cauliflower is the earliest, most hardy, and in fact the Cauliflower that you can plant and expect a crop of true, firm, snow-white heads. You cannot get better Snow Ball Cauliflower Seed no matter what price you pay. Many of the beautiful, shapely heads measure from 10 to 12 inches in diameter. Our Cauliflower seed is saved from absolutely perfect plants and is grown by the most experienced and critical growers in localities best suited for perfect development. Best for forcing; best for Wintering over early crop. Every plant will produce a fine head. Pkt., 15c.; 1/4 oz., 75c.; oz., \$2.50; $1 / 4 \mathrm{lb} ., \$ 8.00$.

Early Dwarf Erfurt. Every grower of cauliflower should plant this strain, especially recommended for forcing or open ground. Produces large compact heads of snowy whiteness on short stems. Pkt., 15c.; $1 / 4 \mathrm{oz} ., 75 \mathrm{c}$.; oz., $\$ 2.50 ; 1 / 4 \mathrm{lb} ., \$ 8.00$.

Veitch's Autumn Giant. A distinct and valuable late variety, producing large heads pure white, firm and compact. Being thoroughly protected by the foliage the head remains a long time fresh and fit for use. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 35 \mathrm{c}$.; oz., $\$ 1.00 ; 1 / 4 \mathrm{lb} ., \$ 3.00$.

Danish Giant. (Dry Weather.) Its main feature is the fact that it will stand an unusual amount of dry or warm weather and still produce perfect, large, solid heads. In districts where heretofore it has been impossible to grow Cauliflower, this fine variety has proven a success. It is ready for market or table about a week later than Erfurt Earliest Dwarf. Pkt., 25c.; $1 / 4 \mathrm{oz} ., 85 \mathrm{c}$.; oz., $\$ 3.00 ; 1 / 4 \mathrm{lb} ., \$ 10.00$.

## CARROT

Culture-Sow in drills to 24 inches apart, using from 4 to 5 pounds to the acre, according to the distance between the rows. It is necessary to sow carrots quite thickly, on account of the young plants not having sufficient strength to come through the ground when sown thinly. Cover one-fourth inch deep and see to it that the soil is well firmed about the seed. As soon as the plants appear use the cultivator or wheel hoe, and do not let the weeds get a start. Thin to 3 to 4 inches apart in the row as soon as the plants are large enough. Gather and store for Winter use like beets or turnips.

One ounce of seed will sow a row 100 feet long. Four to five pounds will sow an acre.


## Danvers Half Long

 Although the roots of this variety at maturity are comparatively short they often produce as large a bulk as the longer field sorts and are more easily harvested. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb}$., 45c.; lb., \$1.35.Guerande or Ox Heart. Especially desirable for soil so hard and stiff that longer rooted sorts would not thrive in it. The tops are comparatively small. The mature roots are four and one-half to five inches long, very thick, ending abruptly in a small tap root. The flesh is bright orange, fine grained and sweet. When young the roots are desirable for table use as a medium early carrot and when mature they are equally good for stock feeding. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb} ., 45 \mathrm{c}$.; lb. \$1.35.

Half Long Scarlet Nantes, Stump Rooted. This extensively used, half long early variety has small tops and is excellent for the market or home garden. The roots are cylindrical, smooth and of a bright orange color. The flesh is orange, becoming yellow in the centre but very tender throughout. This variety is of the finest quality and is one of the most symmetrical and handsome of the medium sized sorts. The mature roots are usually five to six inches long. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb}$., 50 c .; lb., $\$ 1.50$.

Early Scarlet Horn. One of the most popular varieties grown. Color deep orange; flesh fine grained and of excellent grown. tops small; has a short, stump-shaped root. Grows well in shallow soil. One of the best for early outdoor planting and for table use. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb} ., 45 \mathrm{c} . ; \mathrm{lb} ., \$ 1.60$.

Early French Forcing. One of the earliest varieties in cultivation and very desirable for forcing. The tops are very small. The roots are reddish-orange and are nearly round when forced quickly in very rich, well prepared soil, but are somewhat longer when grown outdoors. When fully matured the roots are about two to two and one-half inches long, but they should be used before fully grown while young and tender. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb} ., 50 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.60$.

## CARROTS FOR STOCK FEEDING

Improved Long Orange. The roots of the improved strain of this variety we offer are very deep orange, long and comparatively thick, often twelve inches in length and three inches in diameter at the crown, tapering regularly to a point. The tops are rather large. This intermediate to late maturing sort is suitable for table use as well as stock feeding, combining great productiveness with uniform shape where grown in light, deep, rich soil. When of size suitable for the table, the roots are tender and of good quality. Pkt., 10c.; oz., 20c.; 1/4 lb., 45c.; lb., \$1.25.

Large White Belgian. Grows one-third out of the ground. Root pure white, green above the ground and has a shell top. It will grow to a very large size on rich soil and is very easily gathered. Flesh rather coarse and used exclusively for stock feeding purposes. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 35 \mathrm{c} . ; \mathbf{l b} ., \$ 1.00$.

## CELERY

Culture-Sow the seed, which is very slow to come up, early in the Spring, in rich, mellow ground, in a situation where it can be protected from the parching heat of the Summer sun; water freely in dry weather. When the plants are five to six inches high, transplant a portion in trenches well manured; the dwarf varieties three feet and the tall four feet between the rows; plant six inches apart in the rows, pressing the earth to the plants. As they advance in growth blanch by earthing up, which should be performed gradually in fine weather, taking care not to bury the heart of the plants. A light dressing of salt applied when earthing up is beneficial.


Golden Self-Blanching. A dwarf sort, with numerous heavy and solid stalks, easily blanched. Heart solid, and with the leaves of a beautiful golden yellow. Pkt., 15c.; oz.. 45 c .; $1 / 4 \mathrm{lb} ., \$ 1.75$; lb., $\$ 6.00$.

White Plume. 100 days. The stalks and heart are white, of good eating quality, crisp, solid, and of nutty flavor; is ornamental, resembling an ostrich feather. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.; 1b., $\$ 3.00$.

Easy Blanching Celery. A Celery with remarkably easy blanching characteristics, so much so that those who have never been successful in growing good Celery may plant it with the assurance that the crop will equal in quality and appearance Celery grown by professional growers, and it will be found useful both for early use and for keeping during the winter, characteristics extremely valuable in a Celery to be grown in the home garden. The plants make a thick, healthy growth and the stalks are thick, very tender and brittle, with a rich flavor which will quickly appeal to all who eat it. The ease with which it may be blanched, together with its long season for use, will strongly recommend it, both to the amateur gardener as well as the commercial Celery grower. Pkt., 10c.; oz., 75c.; $1 / 4 \mathrm{lb} ., \$ 2.75$; 1b., \$10.00.

Winter King. Of short, stocky growth, with broad, heavy stalks. An excellent variety for winter use. When blanched the stalks are of a creamy-white color and very attractive. Its flavor, crispness and long-keeping qualities combine to make this sort one of the best winter varieties. Pkt., 10c.; oz., 45c.; $1 / 4 \mathrm{lb} ., \$ 1.50 ; 1 \mathrm{lb} ., \$ 5.00$.

Giant Pascal. This is a green-leaved variety and is an excellent sort for Fall and Winter use. It blanches to a beautiful yellowish-white color, is very solid and crisp, having a fine nutty flavor. Pkt., 10c.; oz., 30c.; $1 / 4$ 1b., 85c.; 1b., $\$ 3.00$.

Dwarf Golden Heart. Very fine; when blanched the heart is of a waxy, golden-yellow, rendering it a most striking and showy variety for either market or private use. Pkt., 10c.; oz., 25 c .; $1 / 4 \mathrm{lb}$., 85 c .; 1b., $\$ 3.00$.

Celery Seed for Flavoring. Seed for flavoring soups, stews, etc., not for sowing. $1 / 4 \mathrm{lb}$., 15 c .; 1b., 50c.

## CELERY PLANTS

## Ready July-August

White Plume, Giant Pascal, Golden Self-Blanching, Dwarf Golden Heart, Winter King, Easy Blanching.

## Celery Plants- 50 for $\mathbf{4 0 c}$.; 100 for 75c.

If wanted by Parcel Post add 10c. per 100, to cover cost of postage and packing.

All plants will be packed in live moss to insure long shipment. No plants shipped Saturday.

## CELERIAC

## (Turnip Rooted Celery)

Culture-This plant forms a thick root, which is used instead of the stalks. It is fit to use when about two inches in diameter. Seed should be sown and given same treatment as Celery, but the plants do not require earthing up. Plants can be set six inches apart in rows two feet apart. To keep over Winter, treat same as carrots or beets, except that moist soils should be worked up about the roots to keep them plump.
Large, Smooth Prague. A large Celery flavored root used extensively for flavoring soups, pickles, etc.; also relished sliced as a salad with pepper and vinegar. It is also used to flavor chicken and potato salad. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb} ., 60 \mathrm{c}$.; lb., \$2.00.

## CHERVIL

Culture-Sow in early spring in rich, well prepared soil. The seed is slow to germinate, sometimes remaining in the earth four or five weeks before the plants appear. When the plants are about two inches high, transplant or thin to about one foot apart. They are ready for use in six to ten weeks from sowing.

Curled. It is a hardy annual with aromatic leaves which are used for flavoring soups or for garnishing meats and vegetables. Pkt., 10c.; oz., 15 c .; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$.; 1b., $\$ 1.10$.

## CHIVES

A small, hardy, perennial plant, resembling the onion in appearance, and growing in clusters. They are grown for the young leaves, which are produced freely from early spring until late fall, and give a mild onion flavor to meats, salads and various dishes. The tops appear early in the spring, and can be cut off close to the ground when needed. They can also be grown in pots in a sunny window during the winter. Pkt., $10 \mathrm{c} . ; \mathrm{oz} ., 25 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.; 1b., $\$ 3.00$.

## CHICORY

Culture-Sow in open ground in June in rows 12 inches apart, selecting good, deep, rich soil. Roots should be taken up in November, selecting those that have attained a diameter of from $11 / 4$ to 2 inches (discard divided roots and those with narrow leaves, as well as any which bear several heads). Trim off tops about $11 / 2$ inches from the neck, and any secondary shoots that appear on the sides. Cut off the lower end of roots so they are of a uniform length of eight to ten inches. Plant in a trench 16 to 18 inches deep. Place roots upright one and one-half inches apart, fill the trench completely with good, light, well-drained soil.

Witloof (French Endive). This grows in a solid oblong head and blanches ivory-white. When lifting, cut whole head with part of the roots to hold the leaves together. It is the choicest of all the winter salads, and is used to such an extent in this country that much of it is imported. Pkt., 10c.; oz., 20c.; $1 / 41 \mathrm{~b} ., 60 \mathrm{c}$.; 1b., $\$ 1.60$.

## COLLARDS

Culture-This is a tall, loose-leaved cabbage-like plant. It is extensively used for the table, as well as for stock feeding in the South, where it continues in growth and is usable throughout the entire winter. Collards usually succeed in locations where cabbage cannot be grown to perfection. Sow the seed thickly in drills, in rich ground, transplanting when about four inches high; or sow in drills where the plants are to remain and when well started thin to two or three feet apart in the row. In the South seed may be sown from January to May and from August to October.

Georgia, Southern or Creole. This is the white or green stemmed variety, growing two to three feet high and forming a large, loose, open head or cluster of leaves with a rather long stem. A frost, if not too severe, will improve rather than injure the quality of the leaves. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$.; 1b., \$1.10.

## CORN SALAD <br> (Fetticus)

Culture. Sow in August or September for winter or spring about one-quarter inch deep, in rows one foot apart. Thin out and keep clear of weeds. Protect in winter by thin covering of straw or meadow hay. Ready early in spring; use same as Lettuce. For summer use sow early in spring.

Large Seeded Broad Leaved. Used as a small salad throughout the winter and spring. Sow early in spring in drills one foot apart and keep weeds down by frequent hoeing. For winter and early spring use, sow in drills in August and September. Cover with straw on approach of winter. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$. ; 1b., $\$ 1.10$.

## CORN

## SWEET OR TABLE VARIETIES

A rich, warm, alluvial soil is the best, but excellent sweet corn can be raised on any good, ordinary soil, if it is deeply and thoroughly worked before planting. In the north sweet corn may be planted as early as can be done without risking great loss from frosts or from rotting of the seed in the soil, but with the main crop varieties especially, it is well to wait until the ground has become warm as the sweeter varieties are more sensitive to cold and wet than field corn or varieties of inferior quality.

If planted in rows, make the rows three to four feet apart, according to the vigor of growth of the variety, and place the seed twelve to sixteen inches apart in the row, covering one-inch deep with fine soil firmly pressed down.

If planted in hills, make the hills for the early varieties three feet apart each way and plant four to six kernels to the hill. For the later sorts the hills should be three and one-half to four feet apart each way. Hoe frequently and when six inches high thin so as to leave three or four plants in the hill. Give frequent and thorough but shallow cultivation until the tassels appear.


Early Evergreen

Adams' Extra Early. The hardiest and earliest variety for table use; it can be planted earlier than any other, but is not a sweet corn. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., $\$ 1.40$; pk., $\$ 2.80$.

Black Mexican. The sweetest and most desirable for family use. When dry the kernels are black. Pkt., 10c.; pt., 25c.; qt., 40c.; 4 qts., $\$ 1.10 ;$ pk., $\$ 1.75$.

Burpee's White Evergreen. Similar to Stowell's Evergreen, ears fully as large, but about five days earlier in maturity. The grains remain tender considerably longer than Stowell's. It retains its whiteness when canned, having no yellow tinge as has the Stowell's. Pkt., 10c.; pt., 30c.; qt., 50c.; 4 qts., $\$ 1.65$; pk., $\$ 3.20$.

Country Gentleman or Shoe Peg. This variety has a small, white cob, densely covered with irregular rows of very long, slender, white grains of excellent quality. The ears are seven to nine inches long. The stalks are from six and one-half to seven feet high. It is well adapted for canning as well as the home garden and market, and many consider it as the best of the late varieties. Pkt., 10c.; pt., 30c.; qt., 50c.; 4 qts., $\$ 1.65$; pk., $\$ 3.20$.

Golden Bantam. This is an early sweet corn with golden yellow grain, very tender and of excellent quality. The ears are eight rowed, six to seven inches long and of the medium size found most suitable for the table. The flavor is exceptionally rich and delicious. The stalks are four to five feet high. Our stock of this splendid home garden and market variety has been very carefully selected and is decidedly superior to much that is offered. Pkt., 10c.; pt., 30c.; qt., 50c.; 4 qts., $\$ 1.65$; pk., $\$ 3.20$.

Golden Giant Sugar Corn. A variety of recent introduction which is a cross of Howling Mob with Golden Bantam, and produces ears which are much larger than Golden Bantam, but of the same delicious quality, and being hardy, the seed may be planted as soon as the ground becomes warm. The cob is of small diameter, and contains twelve to eighteen rows of long, thick grains which cover the entire surface and are deep orange in color, extremely juicy and sweet. It may be planted for succession throughout the entire season. Pkt., 10c.; pt., 30c.; qt., 50 c .; 4 qts., $\$ 1.65$; pk., $\$ 3.20$.

Kendel's Early Giant. Remarkably large in ear for a second early sort and extensively grown in some localities for the market. The stalks are about five and one-half feet high. The ears are about eight to nine inches long, twelve rowed. The grain is white, rather broad and shallow, and the quality very good. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., $\$ 1.45 ;$ pk., $\$ 2.80$.

Late Mammoth. This variety produces the largest ears of any sweet corn. It is noted for the immense size of the ears, which are often twelve inches long, but the grain is very white, sweet, tender and delicious. They are sixteen or eighteen rowed. The stalks are very large, about eight feet high. Pkt., 10c.; pt., 30c.; qt., 50c.; 4 qts., $\$ 1.65 ;$ pk., $\$ 3.20$.

Mammoth White Cory. We consider this the best extra early corn for the market and home garden. The ears are very large for so early a variety. The stalks are about four feet high, each generally bearing two large, finely shaped ears which become fit for use as early as those of any variety. They are twelve rowed, six to seven inches long, very symmetrical and handsome, seldom with any opening between the rows at the base. The grain is large, broad, very white and of remarkably good quality for such an early sort. We have found that Mammoth White Cory makes a large and attractive ear of good quality earlier than any other corn. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., $\$ 1.40$; pk., $\$ 2.80$.

Stowell's Evergreen. The standard main crop variety, much used for the home garden, market and canning. It is hardy and productive, very tender and sugary, remaining a long time in condition suitable for boiling. Our stock has been carefully grown and selected to avoid the tendency to a shorter grain and deterioration in the evergreen character of this best known of all late sorts. The ears about seven to eight inches long, fourteen to twenty rowed, with very white grain. The stalks are about seven and one-half feet high. Pkt., 10c.; pt., 30c.; qt., 50c.; 4 qts., $\$ 1.65$; pk., $\$ 3.20$.
Early Evergreen. This excellent sort, has proven its merit as the best evergreen strain that is distinctly earlier than Stowell's. The strain we offer has to a remarkable degree all the qualities that have made Stowell's Evergreen the leading main crop sweet corn for so long a time. The ears of Early Evergreen are about seven to seven and one-half inches long, with fourteen to twenty more or less irregular rows with very deep, white grain of the very best quality. Stalks about six and one-half to seven feet high. A very desirable main crop variety for home garden and market, and well adapted for canning. Pkt., 10c.; pt., 30c.; qt., $50 \mathrm{c} . ; 4$ qts., $\$ 1.65 ; \mathrm{pk} ., \$ 3.20$.

## FIELD CORN

Eight Rowed Yellow. Flint variety with ears ranging from ten to twelve inches in length and one and a half inches in diameter. It is extremely well filled at both butt and tip and the kernels are large, broad and of a very distinct yellow color. Matures in 80 days. Qt., 30c.; 4 qts., $\$ 1.00$; pk., $\$ 1.50$; bushel, $\$ 4.50$.

One-Hundred-Day Bristol or White Cap Yellow Dent. This is one of the most prolific varieties of dent corn grown. Said to give better results on poor, thin or sandy soil than any other kind. The corn is yellow with a white tip or "cap" to each kernel, so that the ear looks white on the outside, but when shelled is light yellow and very handsome. The ears are of good length (about 10 inches), with 12 rows, and filled out to the tips. Qt., 30c.; 4 qts., $\$ 1.00 ;$ pk., $\$ 1.50$; bushel, $\$ 4.25$.

Longfellow, Long Yellow. Ninety days. Ears averaging 13 inches. Very prolific. Narrow, small cob. Used quite frequently for replanting. Ot., 30c.; 4 qts., $\$ 1.00$; pk., $\$ 1.50$; bushel, $\$ 4.50$.

Mammoth Chester County. One of the very best for field culture, fine large ears, and producing a large quantity of fodder. Qt., 30c.; 4 qts., $\$ 1.00 ;$ pk., $\$ 1.50$; bushel, $\$ 4.50$.

Mammoth Golden Dent. A cross between the Mammoth Chester County and the Oregon; we think this the most productive variety grown. Qt., 30c.; 4 qts., $\$ 1.00$; pk., $\$ 1.50$; bushel, $\$ 4.25$.

Early Mastodon. An early dent, of strong growth. Ears and grain large. A strong and quick grower, very productive, grains white and yellow. Qt., 30c.; 4 qts., $\$ 1.00$; pk., $\$ 1.50$; bushel, $\$ 4.50$.

Early Leaming. This variety has always been used foremost by most planters of field corn in the locality of Philadelphia. It is readily distinguished by the beautiful long ears of deep grained, uniform kernels, resplendent in a deep shade of golden orange. The cob when shelled is very small and of reddish color. The stalks grow about 7 feet high, very leafy, excellent for fodder, and on the average will produce two ears to the stalk. This strain assures the largest ears with every kernel perfect; ripens in 90 days and occasionally crops 100 bushels to the acre. Our stock is grown by the most experienced grower, who carefully selects and re-selects the seed to assure the planter a bumper crop. Every grain is uniform and perfect. Qt., 30c.; 4 qts., $\$ 1.00 ;$ pk., $\$ 1.50$; bushel, \$4.50.

Golden Beauty. The broad, massive golden yellow dented grains are arranged very evenly on gigantic ears. Fodder is enormous, often growing 12 feet high; matures late, but fields wonderful crops; desirable for silo and ensilage purposes. Qt., 30c.; $4 \mathbf{q t s} ., \$ 1.00$; pk., $\$ 1.50$; bushel, $\$ 4.50$.

## FODDER AND ENSILAGE CORN

Hickory King or White Ensilage. Remarkable for its large grain and small cob. A vigorous grower, ears round and of good size, two to four ears to the stalk, grain pure white. Qt., 20c.; 4 qts., 70c.; pk., $\$ 1.15$; bushel, $\$ 4.25$.

Eureka Ensilage (White). This grows invariably 10 to 12 feet high, stands up during the most severe wind storms. Seed is white, very deep and broad, with a thin cob. It will yield more fodder than any other variety. Qt., 30c.; 4 qts., $\$ 1.00 ;$ pk., \$1.50; bushel, \$4.50.

Red Cob Ensilage. An excellent silo corn, stalks tall, short jointed and very leafy, producing as high as 45 tons of fodder per acre. Ears large with pure white, deep grains; cob red. Qt., $30 \mathrm{c} . ; 4 \mathrm{qts} ., \$ 1.00 ; \mathrm{pk} . \$ 1.50$; bushel, $\$ 4.25$.

## POP CORN (For Popping)

A few years ago Pop Corn was grown only in gardens, rather as a side issue from the main business of the farm. It was plentiful throughout New York and the New England States.

Now it is grown as a special crop, great quantities are raised in the Central Western States, and owing to the careful selection of seed and thorough cultivation covering a series of years, this district now produces a quality of Pop Corn superior to any heretofore raised, the White Rice Pop Corn being the most popular variety.

Who does not enjoy munching a snowy pop corn ball flavored with delicious syrup, or relish a bowl of crisp corn plentifully sprinkled with salt and butter?

White Rice. A very handsome and prolific white variety. The ears are five to seven inches long. The kernels are long, pointed and somewhat resemble rice. This excellent rather late maturing variety yields heavily and is considered the best pop corn for parching. Lb., 10c.; 3 lbs., 25c. (shelled).

Queen's Golden. Produces ears in great abundance on stalks nearly six feet high. It pops perfectly white. A single kernel will expand to nearly an inch in diameter. Lb., 14c.; 2 lbs., 25c. (shelled).


## POP CORN POPPERS

| 1-qt. size ( $5 \times 7$ inches) | 25c. each. |
| :---: | :---: |
| 2 -qt. size ( $71 / 2 \times 91 / 2$ inches) | 40c. each. |
| 4 -qt. size (9x12 inches). | 85c. each. |
| Handles included. |  |

## CRESS

Fine Curled or Pepper Grass. As early in spring as the ground can be worked sow the seed in rich, well prepared soil, in shallow drills about 16 inches apart, covering with about one-half inch of fine soil firmly pressed down. When the young plants are well started thin four to six inches apart in the row. For succession plant every two weeks, thinning out as required for use. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 40 \mathrm{c} . ; 1 \mathrm{~b} ., 75 \mathrm{c}$.

True Water. This is a distinct variety of cress with small, oval leaves. It thrives best when its roots and stems are submerged in water. A fair growth may be obtained in soil which
is kept wet, but does best when grown along moist banks or in tubs in water-covered soil. It is one of the most delicious of small salads and should be planted wherever a suitable place can be found. The seed is usually sown and lightly covered in gravelly, mucky lands along the borders of small, rapid streams. The plants will need no subsequent culture, as under favorable conditions they increase very rapidly by self-sown seed and extension of the roots. When gathered for the market the shoot should be cut, not broken off. In summer it is best to cut them closely, the oftener the better. Pkt., 10c.; oz., 50c.; $1 / 4 \mathrm{lb} ., \$ 1.60 ; \mathrm{lb} ., \$ 6.00$.

## CUCUMBER

The Cucumber can be grown by any one who has a few square yards of soil with an exposure to the sun. For early use, make rich hills of well rotted manure the latter part of Spring, planting a dozen or more seeds, covering one-half inch deep, pressing the earth firmly over them. When danger from insects is over, pull all but three or four of the strongest plants; make the hills from four to six feet apart. For pickles,


Improved Arlington White Spine
Improved Arlington White Spine. 60 days. This is one of the best for table use now being grown. Vines vigorous, fruit straight and handsome, color light green, with few white prickles, tender and of excellent flavor. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{l b}$. , 40c.; 1b., \$1.25.

Japanese Climbing. A trellis variety used for shade as well as eating purposes. The vine is very ornamental producing extra big light green fruits in abundance. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$., 45c.; 1b., $\$ 1.25$.

Improved Long Green is a standard main crop variety. The vines are very vigorous and productive. The fruits are very long, often 12 to 15 inches when mature. They are uniformly slender and of a beautiful dark green color. The large warts and spines are well distributed over the entire surface of the fruit instead of being clustered at one end as in inferior stocks. It is a standard variety for slicing and is very largely used for pickles. This is probably the most extensively used cucumber for the home garden and market. Ready for use in 70 days. Pkt., 10c.; oz., $15 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 50 \mathrm{c}$.; 1b., $\$ 1.50$.

Early Fortune. The finest type of the White Spine yet produced. Early, very productive and disease resistant. Fruits 8 to 9 inches long, slightly tapering. Flesh white, very firm and crisp, with but few seeds. Color rich dark green, which does not fade when shipped long distance. A great favorite with growers for long distance shipping. Ready for table use in 60 days. Pkt., 10c.; oz., 15c.; $1 / 4$ 1b., 40c.; 1b., $\$ 1.25$.

Boston Pickling. This is a very prolific and exceedingly popular variety. The fruits are short, smooth, bright green and of excellent quality. For producing medium sized pickles this variety is highly esteemed. Ready for use in 50 days. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.; 1b., $\$ 1.25$.


West India Gherkin (or Burr)
West India Gherkin. A small fruited variety; very prolific and used only for pickling. Fruits are thick and rounded in shape, ranging from 2 to 3 inches long and covered with sharp spines. Pkt., 10c.; oz., 15c.; $1 / 4$ lb., 45c.; 1b., $\$ 1.50$.
Jersey Pickle (Selected Stock). One of the very best of pickling cucumbers, vines vigorous and productive, fruit long, firm and crisp; when small used for pickles, when large for sweet pickles. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$., 40c.; 1b., $\$ 1.25$.

Davis Perfect. Resembles a hot-house cucumber so closely that dealers cannot tell the difference, it being equally good for the hot-house or outdoor culture. It is ideal in shape, rich, dark green color, uniform and regular in size, it is exceedingly tender, and as a slicing cucumber for the table it is unsurpassed. It is almost seedless one-third of its length from the stem and the seeds contained in it, when in slicing condition, are so small and tender that they are almost unnoticed. Exceedingly productive. Pkt., 10c.; oz., 15c.; $1 / 4$ 1b., 45c.; lb., $\$ 1.50$.

## DANDELION

Cultural Directions-The seed is sown one-half inch deep in the open ground as soon as it can be worked in spring, in rows one foot apart, thinning the plants to about three inches apart if grown for "Greens" or if to be blanched for salad the rows should be 15 to 18 inches apart and the plants thinned to about eight inches. A gathering of young leaves may be made in eight or nine weeks from seed sowing and be continued until the growth gets too old and bitter. The plants being hardy if allowed to stand over winter will yield a very early crop of tender young leaves the following spring.

One ounce will sow 100 feet of drill.
Improved Broad Leaved. A much improved variety, by careful selection for size of leaf and for earliness. Pkt., 10c.; oz., 50c.; $1 / 4 \mathrm{lb}$., $\$ 1.50 ;$ lb., $\$ 5.50$.

## EGG PLANT

Sow in hot-beds early in March, transplant middle of May to first of June, in a rich, warm piece of ground, about 30 inches apart. Draw the earth up to their stems when about a foot high. Egg-plant seed will not vegetate freely without substantial heat, and if the plant gets the least chilled in the earlier stages of growth, they seldom recover. Repeated sowings are sometimes necessary. Care should be taken in cutting the fruit so as not to disturb the roots, which injures the plants. Matures for table in 120 days.


Black Beauty. Two weeks earlier than the New York Spineless Egg Plant and a splendid shipper. Fruit large and of fine flavor. Plants branch freely near the ground. Skin is a rich lustrous black. Satin gloss and rich coloring add greatly to the beauty of the fruit. The heavy leaves which attach the fruit to the stems are bright green, making a beautiful contrast with the fine dark color of the fruit. Thoroughly free from spines or thorns. Fruit sets freely. Being two weeks earlier than the New York Purple Plant they readily bring double the price. Pkt., 10c.; oz., 40c.; $1 / 4 \mathrm{lb}$., $\$ 1.25$; lb., $\$ 4.50$.

New York Improved Spineless. This is an entirely spineless strain of the large purple-fruited type. Our strain of this variety is especially fine. The plants are most productive, bearing oblong fruits which are a beautiful rich purple. Pkt., 10c.; oz., 40c.; $1 / 41 \mathrm{lb}$., $\$ 1.25$; lb., $\$ 4.50$.

## EGG PLANT, PLANTS

Ready after May 1st. Pot grown stock only. Ea., 7c.; doz., 70c. Not mailable.

## ENDIVE

An excellent fall and winter salad, when Lettuce is getting scarce. Sow late in the spring to middle of summer in shallow drills, and thin out to a foot apart; blanch by tying the leaves together near the top.


Green Curled Endive
Green Curled is the hardiest variety, with beautifully curled dark green leaves, which blanch white, and are very crisp and tender. Pkt., 10c.; oz., 20c.; $1 / 4$ 1b., 50c.; 1b., $\$ 1.75$.

Broad Leaved Batavian (Escarolle) has broad, thick, plain or slightly wrinkled leaves. It is principally used for cooking, and making a larger head, is preferred for stews and soups; if the outer leaves are gathered and tied on the top, the whole plant will blanch nicely, and make an excellent salad for the table. Pkt., 10c.; oz., 15c.; 1/4 1b., 50c.; 1b., $\$ 1.60$.

French Endive (Witloof Chicory). Grown extensively for salads, and commands high prices. Must be bleached similar to Celery. Pkt., 10c.; oz., 20c.; $1 / 41 \mathrm{lb} ., 60 \mathrm{c}$.; 1b., $\$ 1.80$.

## HORSE RADISH ROOTS

Culture. Horse Radish rarely produces seed, but is grown from pieces of the root. For the home garden they may be set wherever a few feet of space is available, but when grown as a crop they should be set in rich, moist, well prepared ground in rows two and one-half feet apart and about eighteen inches apart in the row. Set the roots vertically, small end down, the top of the root one to three inches below the surface. Cultivate thoroughly until the tops cover the ground, when their shade will keep down the weeds.

Maliner-Kren or Bohemian. A new variety from Bohemia; producing very large, pure white roots. Strong sets. 100, \$1.25; $1000, \$ 10.00$.

## KALE-Borecole

This is extensively grown, especially in the south during the fall, winter and spring. The leaves are used principally for greens. A favorite way is to cook them with bacon. The leaves are also used for garnishing.

Where climate permits seed may be sown any time from August to October, broadcast or preferably in drills eighteen inches apart so that the plants when small may be cultivated. The quality is improved rather than injured by frosts if not too heavy. Farther north sow in April or May in rich, light soil in rows two to three feet apart and where plants of the largest size are desired thin to two feet apart in row. It is better not to cut or handle the plants while frozen, but if this is unavoidable, thaw them out in cold water. The young shoots which start up in the spring from the old stumps are very tender and make excellent greens.

Siberian Curled Kale. The green leaves are very large and comparatively plain in the center, but heavily curled on the edge. It is a fast grower, extremely hardy and will stand longer in the spring without bolting than any other variety. Pkt., 10c.; oz., 15c.; $1 / 41 \mathrm{lb} ., 35 \mathrm{c}$.; 1b., 90c.

Tall Green Curled Scotch. The plant of this variety grows to three or four feet high, bearing long, plume-like, light green leaves which are deeply cut, also finely curled at edges. Very orna mental and so hardy that a moderately heavy frost improves rather than injures its quality. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{l b}$., 40c.; 1b., \$1.25.


Dwarf Green Curled Scotch. Makes excellent greens for winter use, dwarf and easily protected during the winter. Pkt., 10c.; oz., 15c.; 1/4 1b., 40c.; 1b., \$1.25.

## KOHL RABI

The edible part is the turnip-shaped bulb formed above ground. It is tender and excellent when used before fully grown, combining somewhat the flavors of cabbage and turnip.

Culture. Seed should be sown in light, rich soil as early in spring as possible in rows one and one-half feet apart and when well established thin to six inches apart in the row. Plantings at intervals of ten days will give a succession until hot weather, when they fail to grow well. Plantings may be made the latter part of July for fall use.
Early White Vienna (Extra for forcing). This variety is extremely early with distinctly small tops. The bulbs are of medium size, very light green or nearly white, and are of best quality for the table if used when about two inches in diameter. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb} ., 75 \mathrm{c}$.; 1b., $\$ 2.50$.
Early Purple Vienna. Very early with small top, the leaf stems being tinged with purple. Bulbs of medium size, purple; flesh white. Desirable for forcing and early outdoor planting. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb}$., 75 c .; 1b., $\$ 2.50$.

## LEEK

The Leek is hardy and of easy culture; sow early in spring in trenches eight inches deep, and have the soil at the bottom fine and rich; thin six to eight inches apart, and when the plants are twelve inches high, gather the leaves together and fill the trench so as to blanch the lower part of the plant.
Large American Flag. A desirable strong growing, broad leaved leek, hardy and productive. It is a favorite with many market gardeners and is also extensively used for the home garden. Pkt., 10c.; oz., 20c.; 1/4 1b., 60c.; 1b., \$2.00.

London Flag. 90 days. This is the best variety and succeeds better in this country than any other. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb} ., 60 \mathrm{c} . ; \mathbf{l b} ., \$ 2.00$.

[^1]
## LETTUCE

There is no vegetable which is more universally used than this. It is of easy culture, and thrives best in rich, moist soil. Its quality depends largely upon rapid and vigorous growth; to secure this, have the soil rich and mellow, with frequent surface cultivation and an abundant supply of water.

## Loose-Head or Cutting Varieties



## Early Curled Silesian

Early Curled Silesian (Seed white). An early variety of strong growth, leaves large, light yellow and wrinkled. It does not form a head, but is the best variety for cutting when young. Pkt., 10c.; oz., 20c.; 1/4 1b., 60c.; 1b., $\$ 2.00$.

Black Seeded Simpson. Very easily grown and one of the most reliable varieties. Does well both outdoors and in greenhouse and forms beautiful, large, loose heads and is very slow to go to seed. Splendid for home garden and market. Pkt., 10c.; oz., 20c.; $1 / 4$ 1b., 60c.; 1b., \$2.00.

Grand Rapids (Seed black). For greenhouse forcing this variety has few equals. It is of quick growth, little liable to rot, and can stand some days after being cut. The plant is upright and forms a loose head or cluster of large yellowish-green leaves which are slightly crimped, blistered and rather thin. Is a good shipper. Pkt., 10c.; oz., 25c.; 1/4 1b., 75c.; 1b., \$3.00.

Early Prize Head (Seed white). A large, clustering, nonheading lettuce, most excellent for the home garden and undoubtedly the most easily grown variety in cultivation. It is too tender, however, to stand shipping or handling on the market. The leaves are finely curled and crumpled, bright green tinged with brownish-red, and are very crisp, tender and sweet. Pkt., 10c.; oz., 20c.; $1 / 4$ 1b., 60c.; 1b., $\$ 2.00$.

## Cabbage or Heading Varieties

New York or Wonderful (Seed white). This very large heading lettuce is desirable not only as a gardenvariety for summer use but is much used as a fall and winter market sort. The plant is very large but compact and tight heading; outer leaves attractive, deep green, broad, frilled at edges. The inner leaves form a large head, very sweet and tender when in condition for use. Pkt., 10c.; oz., 40c.; $1 / 41 \mathrm{lb} ., \$ 1.25 ; 1 \mathrm{~b} ., \$ 4.00$.

Big Boston (Seed white). Very large, smooth-leaved, solidheading variety grown more extensively throughout the east and south than any other. It is congenial to all climates, and is a good shipper. In flavor it probably excels all other smoothleaved varieties. An excellent all year 'round lettuce. Pkt., 10c.; oz., 25c.; 1/4 1b., 75c.; 1b., \$2.50.

Improved Hanson (Seed white). None more reliable for outdoor cultivation. Heads grow to a remarkable size, resembling that of a flat cabbage. Extremely slow to run to seed. Outer leaves are bright green and beautifully frilled on the edges; inner leaves white and deliciously sweet, tender and crisp. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb} ., 60 \mathrm{c}$.; lb., $\$ 2.00$.

Iceberg (Seed white). A beautiful Lettuce, with large, curly leaves of a bright light green, with a very slight reddish tinge at the edges. Handsome heads, unusually solid because of the natural tendency to the large, strong leaves to turn in, which also causes thorough blanching. Crisp, tender and fine flavor. Pkt., 10c.; oz., 30c.; $1 / 4$ lb., 85c.; lb., $\$ 3.00$.


May King Lettuce
May King Lettuce (Seed white). Equal alike for forcing under glass or outdoor planting. The plants are of quick growth, practically all head and handsome. From early spring plantings in the open ground they grow quickly to a diameter of six to seven inches, with the broad, light green outer leaves folding closely about the round solid head. In cool weather the edges of these outer leaves are lightly tinged with brown. The inner leaves are blanched to a rich golden-yellow, and have a specially fine, rich, buttery flavor. The solid round heads are so firmly folded that they can be shipped to distant markets and arrive in the best of condition. It is the very best lettuce for early planting in the spring, and again during August and September for fall use. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb}$., 60c.; 1b., $\$ 2.00$.

Salamander (Seed black). A very extensively used sort of excellent quality for the home garden and market. The variety withstands hot weather remarkably well. It forms a large compact, light green plant. The leaves are broad, thick, somewhat crumpled and closely overlapping so that the inner ones are very fine. Pkt., 10c.; oz., $20 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 60 \mathrm{c} . ; 1 \mathrm{~b} ., \$ 2.00$.

## Romaine, or Cos Lettuce



Paris White Cos
Paris White Cos (Seed white). Grows to a very large size, producing long-pointed, compact bunches. The inner leaves blanch readily and are of fine flavor. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb} ., 75 \mathrm{c}$. ; 1b., $\$ 2.50$.

## LETTUCE PLANTS-Ready May 1 st

Big Boston, May King, Cos, etc.
500, $\$ 2.15$; 1000, $\$ 4.00$. By Parcel Post add 5c. per 100; 25 c . per 1000 .

No plants shipped on Saturday.

## MELON-Cantaloupe

## Salmon-Fleshed Varieties

Culture-Plant early in May, when the ground has become warm and dry, in hills six feet apart each way; use well rotted manure, and if plants grow very rank, finer fruit will be secured by trimming off the ends of the shoots when about three feet long. Do not plant near pumpkins, squashes or cucumbers, as they will mix with and injure the quality of the melons.

Golden Honey Dew-This grand new melon is a sport from Honey Dew, which it resembles except in color. The flesh is a rich golden instead of light green, very sweet, keeps a long time and by many is considered superior to the green-fleshed variety. Pkt., 10c.; oz.; 20c.; 1/4 lb., 50c.; 1b., \$1.75.

Emerald Gem-A splendid early variety, coming in just ahead of Rocky Ford; fruit emerald green in color, globular or slightly flattened, irregularly ribbed and lightly netted; flesh very thick, of a deep rich salmon color, and having an exceedingly small seed cavity. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{1 b} ., 40 \mathrm{c} . ; \mathbf{1 b} .$, \$1.25.


Fordhook
Fordhook-A fine, large, early ripener. Skin dark green, mixed with stripes of lighter green. Thin rind and tough skin, well adapted for shipping. Flesh bright red, crisp and sweet. Flavor one of the finest. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 40 \mathrm{c} . ; \mathbf{l b} .$, \$1.25.

Extra Early Osage-A week to ten days earlier than the old type Osage, and nearly as large; flesh very thick, salmon colored and of high quality. Form, color and general appearance similar to Osage. One of the very best melons we offer. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{Ib}$., 50c.; Ib., \$1.50.

Burrells' Gem-The golden fleshed Rocky Ford. The Burrells' Gem, which is an improved Rocky Ford, averages 2 lbs. in weight, 6 inches in length and $41 / 2$ inches across. It is very solid and has a small seed cavity. The flesh is golden in color, very thick, fine-grained and spicy. An abundant yielder and a good shipper. Pkt., 10c.; oz., 15c.; 1/4 Ib., 40c.; lib., \$1.25.

## Green-Fleshed Varieties

Rocky Ford-70 days-The flesh is deep and thick, and light green in color, except next the seeds, where it inclines towards yellow. The flavor exceedingly fine. The skin is green, regularly ribbed and thickly netted. It is a firm, solid melon, and will carry in perfect condition for a week or more after its removal from the vine. It is a heavy cropper and is in wide favor as a market melon. Pkt., 10c.; oz., 15c.; 1/4 1b., 40c.; 1b., \$1.25.

Honey Dew-The juicy light green flesh frequently measuring two inches thick, entirely stringless and especially luscious in flavor, most tender and practically melting in the mouth. It is as sweet as honey. This delicious flavor extends practically to the very rind. The rind is mottled. The shell is hard and about $1 / 8$ of an inch thick. There is no seed cavity. The seeds are imbedded in a jelly-like pulp. Plant the same time you would any other cantaloupe. When the under side of the melon becomes a golden yellow it is ready to take off. By storing in a cold, dark place in sand, being careful not to allow them to touch each other, they could be kept until Christmas. Pkt., 10c.; oz., 25c.; 1/4 1b., 75c.; 1b., \$1.50.

Montreal Market-Largest of the nutmeg varieties; averaging a weight of 15 lbs ., nearly round, flattened at the ends, deeply ribbed, green, netted skin. Flesh green, thick, and of fine flavor. Pkt., 10c.; oz., 15c., $1 / 4 \mathrm{Ib} ., 40 \mathrm{c}$.; lb., $\$ 1.25$.

Jenny Lind Improved- 65 days-Resembles the old variety only that it matures earlier and is better filled out, roughing up better, and keeping fully a week longer than any other variety. Is a handsome green fleshed sort invaluable for a first early; and of delicious quality. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{1 b}$. 40c.; 1b., \$1.25.

## MELON-Watermelon

Culture-The soil for Watermelons must be light, rich and sandy, for if grown on a heavy soil the quality will be poor, and they will not be so early. When there is more danger of frost drop 8 to 10 seeds in hills 8 to 10 feet apart each way, covering about $1 / 4$ inch deep. As soon as plants commence to run, thin out to 3 best plants in a hill, and cultivate until the vines cover the whole ground. If slow to fruit, pinch off the ends of the growing shoots. Ash or air-slated lime sifted on the young plants while dew is on is good to keep insects out. One ounce will plant about 30 hills, and it takes 3 to 4 pounds to an acre.

Tom Watson-An early, large oblong, dark green melon, with thick netting. An introduction from one of the best melon districts in the South. Rind thin, but tough, making it a favorite shipping sort. The flesh is firm, and of a bright red color, delicious, sweet and melting. An excellent sort for the private or market gardener. The average melon will weigh 35 to 40 pounds and measure 28 inches long about 12 inches in diameter. Very prolific. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{1 b} ., \mathbf{3 5 c}$.; 1b., $\$ 1.00$.

Grey Monarch or Long White Icing-75 days-Very light green skin, flesh bright red, crisp and sugary, excellent quality. Pkt., 10c.; oz., 15c.; $1 / 4$ 1b.; 35c.; 1b., \$1.00.

Cole's Early - An early variety. Large heart, flesh of fine texture and good flavor. Rind thin. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{1 b} ., \mathbf{3 5 c}$.; 1b., $\$ 1.00$.

Georgia Rattlesnake - A variety which has gained great popularity throughout the entire country for its size and fine shipping qualities; shape oblong, of light green color, and beautifully mottled and striped with a lighter shade; flesh scarlet, rind thin, very solid, and both sweet and delicious. Stands transit well. Pkt., 10c.; oz., 15c.; 1/4 lb., 30c.; 1b., 90c.


Kleckley's Sweets
Kleckley's Sweets-A handsome melon for both the private and market garden. Shape oblong, skin dark green, and slightly mottled, thin rind, flesh bright scarlet, very sweet, crisp and melting. Heart solid. One of the best melons grown. Pkt., 10c.; oz., 15c.; $1 / 41 \mathrm{lb} ., 35 \mathrm{c}$.; 1b., $\$ 1.00$.

Halbert's Honey-Fully equal in quality to Kleckley's Sweet which it resembles. It is more even in outline, is blunter at the end, and the skin is of a richer, darker color. Pkt., 10c.; oz., 15c.; $1 / 4$ Ib., 35c.; 1b., $\$ 1.00$.

Citron, Colorado Preserving-An improvement on the old Preserving Citron; seeds green, fruit round to oblong; very productive. Pkt., $10 \mathrm{c} . ; \mathbf{0 z} ., 15 \mathrm{c}$.; $1 / 4 \mathrm{Ib} ., 35 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.00$.

Citron, Red Seeded-The old, well known, red-seeded preserving melon. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$., 35c.; 1b., $\$ 1.00$.

## MUSTARD

Culture-As an ingredient, the green Mustard imparts a delightfully pungent flavor to the various forms of prepared salads. For early crops the seed may be sown in a hotbed in March, and for general crop at frequent intervals throughout the spring, in drills eight to twelve inches apart. One ounce will sow 75 feet of drill.

Giant Southern Curled. Large variety, forming a great mass of beautiful leaves, which are ruffled and finely curled on the edges. Hardy, vigorous, highly recommended. Pkt., 10c.; oz., 15 c .; $1 / 4 \mathrm{lb}$., 35 c .; 1b., $\$ 1.00$.
White English. This is the kind usually preferred for salad. The leaves are light green, mild and tender when young; seed light yellow. Pkt., 10c.; oz., 15c.; 1/41b., 30c.; 1b., 90c.

Brown Italian. This is a larger plant than the preceding, with much darker leaves; seed brown and more pungent. Pkt., 10c.; oz., 15c.; 1/4 1b., 30c.; 1b., 90c.

## MUSHROOM SPAWN

Culture-Mushrooms may be grown in cellars, under benches of green-houses, or in sheds, wherever the temperature of 50 degrees can be kept up through the Winter. The beds should be made from November to February, according to the time the mushrooms are wanted, and it requires about two months for them to begin bearing. Secure fresh horse manure, free from straw and litter, and mix an equal bulk of loam from an old pasture with it. Keep this under cover, taking care to turn it every day to prevent heating, until the pile is large enough to make a bed the required size. Three to four feet wide, eight inches deep and any length desired are the proper proportions for a bed, but these may be varied. Prepare the mixture of loam and manure, making the bed in layers, and pounding down each with the back of the spade. Leave this to heat through for a few days, and as soon as the heat subsides to 90 degrees, make holes in the bed about a foot apart each way and about one inch deep, into which put pieces of the spawn two or three inches in diameter; fill up the holes with the compost, and at the expiration of a week or ten days the spawn will have thoroughly diffused itself through the bed. Spread a layer of fresh soil over the heap to the depth of two inches and cover with three or four inches of hay, straw or litter. Examine the bed often to see that it does not get dry. Take special care however, when water is given, that it be at a temperature of about 100 degrees.

Brandywine Pure Culture Spawn-Per brick, 25c.; per brick (postpaid), 35c.; 5 bricks, $\$ 1.20$; 10 bricks, $\$ 2.15$. Larger lots, prices on application.

## OKRA, OR GOMBO

Cultural Directions-Sow about the middle of May when the ground is warm, in hills about three feet apart; cover seed one-half inch and thin plants to three in a hill. Keep ground well hoed and earth up around the plants to support them. Gather pods while young and tender. Excellent for soups and stews, etc., to which they impart a rich flavor.

Perkins Mammoth Pod. A tall handsome plant producing very long, slender green pods; very prolific and a popular one. Pkt., 10c.; oz., 15c.; $1 / 41 \mathrm{lb} ., 20 \mathrm{c}$. ; 1b., 60 c .

White Velvet. An early maturing and very productive variety, growing about three and one-half feet high. Pods white, long, smooth and very tender. This is not so deeply ribbed as the green sort and is very popular in some sections. Pkt., 10c.; oz., 15c.; $1 / 41 \mathrm{lb} ., 20 \mathrm{c}$.; 1b., 60c.

## ONION

Culture-Onion seed should be sown as soon as possible in the spring, even if the weather is cold, so the soil works up well. This gives them a good start ahead of the weeds, and before dry weather sets in. After thoroughly pulverizing the soil, sow thinly, four or five pounds to the acre, in drills, 14 to 16 inches apart, and about one-quarter inch deep, in strong land, well manured, keeping them well hoed and free from weeds.

The Silver-skin and Yellow Danvers are principally grown (for sets) in this vicinity. Sow the seed early in the spring, very thickly in beds or drills. As soon as the tops die off in the summer, remove them to a dry, airy place, and early in the
following spring replant in rows about two inches apart, the rows wide enough apart to admit of hoeing. The onions by this process are obtained of a large size early in the season. We can also supply the sets themselves early in spring, at current market prices.

The Prizetaker may be grown to large size by sowing in drills early in March, in strong land, and thinning them out to stand two or three inches apart, keeping them well hoed.

Yellow Dutch or Strasburg. A splendid variety for sets. The bulbs are very similar to Yellow Danvers, excepting they are a little more flattened, and have a darker yellow skin. Ripens early, and is a splendid keeper. This is the onion from which our fancy bottom sets are grown. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb}$., 55c.; 1b., \$1.50.


Yellow Globe Danvers. 115 days. A fine variety, originating in Danvers, Mass.; above the medium size, oval shaped; skin yellowishbrown; flesh white, mild and well flavored; very productive. Pkt., 10c.; oz., 20c.; $1 / 4$ 1b., 50c.; lb., \$1.60.

Australian Brown. This remarkable onion is medium in size, hard and solid, most attractive in shape and appearance for the market, it having a beautiful amber-brown color. It is one of the earliest of the globe-shaped yellows, but not so large or as heavy a cropper as some. Noted for its keeping qualities. Pkt., 10c.; oz., 15c.; $1 / 41 \mathrm{lb} ., 45 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.40$.


White Portugal or Silver Skin. Eighty-five days. Large flat onion of mild flavor, skin clear white; grown extensively for sets, very desirable for pickling and is the best white sort for this purpose. Used extensively in the spring for green bunch onions. Pkt., 10c.; oz., 20c.; $1 / 4$ lb., 70c.; lb., \$2.60.


Prizetaker. Seven to nine hundred bushels to the acre, and a single specimen weighing as much as four pounds are some of the things this handsome globe onion will produce. It has a bright, clear, straw color, and grows a perfect globe-shape. Is by far the handsomest, most productive, most profitable, and best of all the yellow globe onions. Large onions can always be raised in a single season from the seed. It has always brought much better prices than any other onion in the market; it never fails to
attract attention on account of its beauty; on the city stalls it has completely taken the place of the large Spanish Onions. The Prizetaker Onion is gifted with strong drought-resisting ability, and we consider this one of its strong points. It is admitted by the most critical onion growers to be the largest, finest flavored, and most superior yellow globe onion under cultivation. Pkt., $10 \mathrm{c} . ;$ oz., 20c.; 1/41b., 50c.; 1b., $\$ 1.60$.

Large Red Wethersfield. 110 days. The standard Eastern variety. Grows to large size directly from the seed; skin deep purplish-red; form round, flat; flesh purplish-white and stronger flavored than any of the other kinds. Pkt., 10c.; oz., 20c.; $1 / 4$ 1b., 55c.; 1b., \$1.75.

Southport White Globe. In shape same as Yellow or Red Globe, but milder, not so good a keeper. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb} ., 80 \mathrm{c}$. ; 1b., $\$ 2.75$.

## ONION SETS

The Onion sets grown in the vicinity of Philadelphia are recognized everywhere as the best in the country; they are more solid and brighter, and their keeping qualities much better than those grown elsewhere. The best varieties are named below. Onions grown from sets come into market long before those grown directly from the seeds, and in consequence much higher prices are realized from them.
Early Red, Wethersfield, Strasburg, Yellow Danvers, Qt., 30c. ; bushel ( 28 lbs.) market price. 1

White Portugal or Silver Skin. Qt., 50c.; bushel, (28 lbs.) market price.

## WINTER SETS

Egyptian, Perennial or Tree Onions. An unusually hardy variety in the colder States, remaining in the ground with safety all winter. It starts early in the spring and may be bunched and marketed several weeks before any other variety. The quality is inferior, but the bulbs find a ready sale when other varieties of onions are wanting. Qt., 25c.; bushel (28 lbs.), Market Price.

## PARSLEY

Sow early in April in rows. Soak the seed a few hours in warm water before sowing, or it may lay two or three weeks in the ground before vegetating. A few Radish Seed mixed with the seed when sowing will mark the rows and facilitate weeding. One ounce to 150 feet of drill. Make open air sowing in April.


Double Curled. A dark green market variety of dwarf habit. Stands the winter better than other varieties. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$., 35c.; 1b., $\$ 1.00$.

Plain Leaved. This is the hardiest variety, foliage very dark green, with plain leaves, having a strong parsley flavor and much preferred in French cooking. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$.; lb., \$1.00.

Hamburg Rooted. The standard rooted sort. The leaves are used for soup greens, and the roots when sliced are much esteemed. Pkt., 10c.; oz., 15c.; 1/4 1b., 35c.; 1b., $\$ 1.00$.


Sugar Parsnip

## PARSNIP

This well-known culinary vegetable does best on a deep, rich, sandy soil; fresh manure should not be used, as it is apt to make the roots coarse and ill-shaped. The seed is sometimes slow to germinate; it should be sown early as possible, covering half an inch deep, and the soil pressed firmly over the seed; thin out so that the plants will stand four inches apart.

Hollow Crown Sugar Parsnip. Is fine grained, true hollow crown; has thick shoulders, tapers symmetrically to a single tap root. Are easily gathered; heavy croppers; roots run uniformly smooth, with fine grained flesh, and good quality. Pkt., 10c.; oz., 15c. ;1/4 lb., 35c.; lb., \$1.10.

## PEAS

The Pea is so generally known that it is needless to give any description of it. There are many new varieties coming out every year, most of which turn out to be no better than the older sorts. We have carefully culled them over, and our list will be found to contain all that are really valuable. The Pea matures earliest in a light, rich soil; but for general crop, a rich, deep loam will be found best. The Extra Early varieties should be sown as soon as the ground can be worked in the spring, and continue every two weeks for a succession. The tall varieties require brush stuck in between rows. The wrinkled varieties are superior, more delicate in flavor, and remain longer in season than the smooth sorts, but are not so hardy.

The dwarf varieties suit best for small gardens, and can be planted in rows one foot apart. One quart for 75 feet of drill, two to three bushels to the acre.


Mingle's Selected Extra Early
Mingle's Selected Extra Early. A smooth-seeded variety that cannot be too highly recommended. In a planting where ten varieties are wanted to produce a continuous succession of Peas from June 1, this variety heads the list, and will give you Peas four or five days earlier. A splendid cropper; Peas very tender, of good flavor, and carried in long, well-filled pods. Height $21 / 2$ feet. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., \$1.70; pk., \$3.15.

We pay postage on packets and ounces. Add 5c. per pint and 10c. per quart for peas when ordered by mail.

## PEAS--Continued


#### Abstract

American Wonder. Fifty-two days. A hybrid between Champion of England and Little Gem; it is an enormous cropper, and ripens in about fifty days from germination. Pods two and one-half inches. Vine 10 inches. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.15 ;$ pk., $\$ 3.30$.


Blue Bantam. A new dwarf, extremely early variety, very productive, bearing on 15 -inch vines many large, well-filled pods of luscious deep green peas, fully as large as Gradus, numbering eight to ten peas to a pod. This pea matures as early as American Wonder and is destined to become a great Market Gardeners' variety. Pkt., 10c.; pt., 35c.; qt., 60c.; 4 qts., $\$ 2.15$; pk., $\$ 3.75$.

Nott's Excelsior. Fifty days. A fine dwarf wrinkled sort, maturing as early as most smooth varieties. Very tender and of fine flavor. Pods $21 / 2$ inches. Vines 14 inches. Pkt., 10c., pt., 30c.; qt., 60c.; 4 qts., $\$ 2.15 ;$ pk., $\$ 3.30$.

Peter Pan. One of the very finest of the large podded, dwarf peas, on the order of Laxtonian, though somewhat earlier. Height, 15 inches. Vine and foliage stout, heavy and dark green; pods $33 / 4$ inches long, very broad, straight and pointed, containing six to eight large, dark green peas of superb quality. Pkt., 10c.; pt., 35c.; qt., 60c.; 4 qts., $\$ 2.15$; pk., $\$ 3.75$.

Gradus or Prosperity. No other pea introduced for years has met with so extensive sale and commanded so high a price. It withstands an extraordinary amount of cold and wet weather, so plant it early and your returns will surprise you. It matures and is marketed before the Pea Louse gets a chance at it. Besides being so attractive, the sweet delicious flavor and excellent quality bring back a customer who has once bought them. Foliage large and luxuriant, pale green in color; pods long, straight, slightly rounded at the point; seed large, wrinkled, cream color, tinged with green, height 3 ft . Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.15 ;$ pk., $\$ 3.30$.

Sutton's Excelsior. A marked improvement in the dwarf wrinkled class. Similar in habit of growth to Nott's Excelsior, but bearing very large, broad pods filled with large peas, tender and of exquisite flavor. As a wrinkled sort it leads in earliness with much larger and handsomer pods than any dwarf early wrinkled pea yet introduced. It is a pea of first-class merit, and a good cropper. Pods 3 inches long, broad, straight and well filled. Seed pale green, wrinkled. Vine 15 inches. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.15 ;$ pk., $\$ 3.30$.

Little Marvel. Vines of dwarf, even growth, averaging 15 inches in height. Heavily set with fine pods and frequently borne in pairs. Ready for table fully as early as American Wonder; vines are larger and produce a much heavier crop. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.15$; pk., $\$ 3.30$.

## NITROGEN GATHERING BAGTERIA

## If you want your pea patch to yield earlier and better,

 inoculate the seed before pianting with MULFORD CULTURE. It encourages vigorous vines, well filled pods and makes it possible for the plants to withstand drought and disease better.MULFORD CULTURE: 35c. per trial bottie; 75c. $1 / 4$ acre bottle.

When ordering be sure and specify wanted for Garden Peas, as each leguminous crop requires a separate culture.

Thomas Laxton. Height 3 feet, an extra early. Pods $31 / 4$ inches and blunt, very prolific and well filled; seed wrinkled, cream color tinged with green. Vine 3 feet. Pkt., 10c.; pt., 30c.; qt., 60c. ; 4 qts., $\$ 2.15 ;$ pk., $\$ 3.30$.


Alaska. An extra early, vine about 2 feet high, seed green and round, in well filled pods, produced in abundance. Excellent for market or family use. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.00 ;$ pk., $\$ 3.30$.

Ameer. Similar to Alaska, but not quite so early. Vine a little longer, pods well filled and somewhat light green dented. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.00$; pk., $\$ 3.30$.

## Second Early Varieties

Premium Gem. An improvement on the Little Gem, being larger and more productive. Does not ripen quite so early, is very luscious in flavor, and is a general favorite. Pods $21 / 2$ inches. Vine 14 to 16 inches. Green wrinkled seed. Pkt., 10c.; pt., 30 c . $;$ qt., $60 \mathrm{c} . ; 4$ qts., $\$ 2.15 ;$ pk., $\$ 3.30$.

Laxtonian. Of vigorous growing habit, luxuriant foliage of dark green color. Large seed, white and green. Pods $31 / 2$ inches long, broad and pointed at the ends. This is a fine half-dwarf wrinkled sort. Pkt., 10c.; pt., 35c.; qt., 65c.; 4 qts., \$2.15; pk., \$3.75.

Potlatch or Big Dinner. A vigorous growing, half-dwarf variety of luxuriant, strong foliage of dark green color. Pods $31 / 2$ inches long, of medium green color, broad, and pointed at the ends. Seed large green and wrinkled. Straw 24 inches long. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.15 ;$ pk., $\$ 3.30$.

Fillbasket. Height 30 inches, of branching habit; pods well filled and therefore indispensable to the market gardener, and large croppers. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.00$; pk., $\$ 3.30$.

Enjoy peas of first quality all summer by planting main crop varieties to succeed the early ones.

## Late Varieties

Dwarf Champion. - 44 days - very much liked by those who have tried it. In quality and flavor equal to Champion of England, and the vine only 2 feet. Equal to Little Gem. Pkt. 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.15$; pk., $\$ 3.30$.

Carter's Daisy orDwarf Telephone. Among the mediumearly dwarf sorts, ripening a week ahead of Stratagem. It is a most desirable pea on account of the large size, beautiful shape and fine quality of its well filled pods, containing six to nine tender sweet peas. Seed green, wrinkled. Pods 4 inches. Vine 13 inchesvery vigorous and quite prolific. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.15$; pk., $\$ 3.30$.

Improved Telephone. One of the recent introductions from England, where it is highly prized; grows about three feet high, and is the best tall pea in existence, an enormous bearer, producing straight, showy pods, containing from nine to ten peas in a pod. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.15 ;$ pk., $\$ 3.30$.

Telegraph or Long Island Mammoth. Very popular with the farmers in most soctions who want a large, handsome pod of deep green color that carries well. Is becoming more popular every year. Height 3 feet. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., $\$ 2.00$; pk., $\$ 3.30$.

Yankee Prince. The king of the second early large-podded wrinkled sorts of the Telephone type. Remarkably healthy, vigorous and productive. Pods of the largest size frequently six inches in length, straight, round at the point, deep green in color and most beautifully shaped, well filled with large peas that are deep green in color and of the richest flavor. Height, four feet. We claim this to be the best of its class. Pkt., 10c.; pt., 30c.; qt., 60c.: 4 qts., $\$ 2.15$; pk., $\$ 3.30$.

## Edible Podded Peas

Mammoth Melting Sugar. This variety is used the same as a snap-bean, both pod and pea being eaten. The pods are large, extremely tender while young, finely flavored and borne in great profusion. Seed white. Height, four to five feet. Pkt., 10c.; pt., 35 c .; qt., 65 c .; 4 qts., $\$ 2.25$; pk., $\$ 3.75$.

Dwarf Gray Sugar. Seed gray, pods purple; large and eaten like string beans. Vine 18 inches. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., $\$ 1.45$; pk., $\$ 2.60$.

## PEPPER

Culture. Sow in hot-beds in March, or in a warm border early in May, transplant and thin out to stand 16 or 18 inches apart; hoe frequently, to keep down the weeds. Edible in 100 to 120 days.


## Large Bull Nose

Large Bell or Bull Nose. Plant vigorous, compact, very productive, ripening its fruit uniformly and early. Fruit large, of blocky form, with thick flesh, usually quite hot. Pkt., 10c.; oz., 35c.; 1/4 1b., \$1.00; 1b., \$3.50.

New Neapolitan. A great market variety on account of its earliness and productiveness: Two weeks earlier than Bull Nose. The fruit is of good size growing on a vigorous stalky plant. The flesh is quite thick and sweet as an Apple. Color a light green changing to a bright red when ripe. Pkt., 10c.; oz., 30c.; 1/4 lb., 90c.; lb., $\$ 3.00$.

Ruby King. Fruit $51 / 2 \times 31 / 2$, bright red in color and of distinctively mild flavor. Pkt., 10c.; oz., 35c.; $1 / 4 \mathbf{1 b} ., \$ 1.00$; 1b., $\$ 3.50$.

Chinese Giant. Plant dwarf, fruit of mammoth size, very broad, but rather short. It is very late and a rather shy yielder. Popular on account of its large size and mild flavor. Our stock is pure and is as good as can be obtained. Pkt., 10c.; oz., 50c.; $1 / 4 \mathrm{lb} ., \$ 1.60 ; 1 \mathrm{lb}$., $\$ 6.00$.

Early Red Squash, or Tomato Shaped. Fruit small, flat, shaped like a tomato; skin smooth, glossy red; flesh thick, mild, somewhat pungent; early and very productive. Pkt. 10c.; oz., 30c.; $1 / 4 \mathrm{lb} ., 90 \mathrm{c}$.; 1b., $\$ 3.00$.
Pimiento. The sweetest Pepper grown, as it does not contain the slightest trace of fieriness. The plants are productive and Peppers medium size and of a shape which is desirable for filling, and when prepared in this manner they are delicious. It may also be used in preparing salads and for flavoring. Pkt., 10c.; oz., 30c.; $1 / 4 \mathrm{lb}$., 90 c .; 1b., $\$ 3.00$.
Long Red Cayenne. Pod long, slim and pointed; color, bright red and very pungent. Pkt., 10c.; oz., 30c.; $1 / 4 \mathrm{lb}$., 90 c .; 1b., $\$ 3.00$.
Red Cherry. Fruits small, bright red and very pungent. Pkt., 10c.; oz., 30c.; $1 / 4 \mathrm{lb} ., 90 \mathrm{c} . ; 1 \mathrm{~b} ., \$ 3.00$.

Chili, Red. Small red, conical pods about ? inches long. Very hot and prolific. Generally used for seasoning and pepper sauce. Pkt., 10c.; oz., 30c.; 1/4 1b., 90c.; 1b., \$3.00.

## PEPPER PLANTS <br> READY IN MAY.

Pot Grown Plants. Doz., 70c.; 100, $\$ 4.00$.
Transplanted. Doz., 25c.; 100, $\$ 1.00$.
Pot grown plants are not mailable.
All plants will be packed in live moss, insuring long shipments. No plants shipped Saturday.

## POTATOES

Potatoes. The soil best suited to the potato is a rich sandy loam, but it seems to thrive in almost any soil and climate. Plant as early in the Spring as the ground can be worked thoroughly, covering about 4 inches in warm soil, and in wet soil 3 inches deep, cultivate to keep down weeds, and draw earth to the plants as they advance in growth.

We make a specialty of handling only first-class stock of the popular Maine-grown varieties, suited to this locality, at the proper season, March 1st to May 15th.

They are put up in original sacks of 165 pounds (or $23 / 4$ bushels) each. Prices varying according to the market.

Irish Cobbler. Vigorous grower, ripens uniformly, and a good keeper.

Red Bliss. Early, great producer, handsome color and resistance to disease make it most popular.

McCormack. A very late heavy yielding potato, good Winter keeper.

Early Rose. Still remains the standard early variety.
Spalding No. 4. Earliest Rose, good cropper, fine appearance. Green Mountain. A popular main crop Potato.
Rural New Yorker. Second early large, smooth, white, wide as long, productive.
State of Maine. Another popular main crop Potato.
Jersey Red Skin. We wish to call attention to this variety of potato which is planted long after all others are in the ground and growing up. Plantings are made of this variety from about June 15th to August 1st, it is late in maturing.

This potato is not planted in the early Spring; it will do well in most any soil, though light soil is preferable. Since this variety sets abundantly it requires plenty of plant food to produce potatoes of good size.

Prices on all varieties. $1 / 2$ pk., 40c.; peck, 75c.; $1 / 2$ bu., \$1.25; bushel, \$2.50.

## PUMPKIN

Cultural Directions. Usually grown in corn-fields, but if grown as a separate crop, seed should be planted in hills 8 to 10 feet apart each way after weather and soil get warm. Hoe often till vines begin to run. Cut pumpkins from vine after the leaves die, leaving 3 to 4 inches of stem attached, and store in a dry place. Handle carefully and avoid bruising. Use one ounce of seed to 20 hills of most varieties; 3 to 4 pounds per acre.

Generally used for planting in corn for stock feeding, and also for making pies; fruit rather oblong, flattened at the ends, often 15 inches in diameter; smooth, hard, reddish-orange distinctly ribbed skin with rich, orange-yellow flesh.
Golden Oblong. Oblong in shape, averaging about $20 \times 10$ inches. Skin golden yellow and tough, making it an excellent keeper. Flesh light yellow and of fine quality. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$., 35c.; 1b., \$1.00.
Green Striped Cushaw. A crook-necked variety. Skin striped green and white, flesh rich yellow, solid, fine grained, very thick and sweet. Pkt., 10c.; oz., 15c.; $1 / 4$ 1b., 40c.; 1b., \$1.25.

King of the Mammoths. Has been grown to weigh 200 pounds, surpassing any other variety for size. The flesh and skin are both bright yellow and of excellent quality. The Mammoth is one of the best pie pumpkins grown, also a splendid keeper and valuable for feeding purposes. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$. , 45c.; lb., \$1.40.

Large Cheese or Kentucky Field. A very productive variety, broad and flat in shape, rich green color, flesh is very tender, good for table or stock feeding. Pkt., 10c.; oz., 15c.; $1 / 4$ 1b., 30c.; 1b., 90c.


Mammoth Golden Cushaw (Crook Neck)
Mammoth Golden Cushaw. Long Yellow Crook Neck, one of the best among pumpkins; sometimes weigh as much as 60 to 80 pounds. Pkt., $\mathbf{1 0 c}$.; oz., 15c.; 1/4 1b., 45c.; 1b., $\$ 1.25$.


New England Pie or Sugar
New England Pie or Sugar. A small, round sort, very sweet, fine grained and of the very best quality. Skin deep orange, flesh rich yellow. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{1 b} ., 30 \mathrm{c} . ; 1 \mathrm{lb} ., 90 \mathrm{c}$.

Tennessee Sweet Potato. Shape similar to a bell, skin and flesh white, very thick and sweet. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$., 40c.; 1b., \$1.25.

## RADISH

Culture. Radishes must make a rapid growth to be crisp and tender. For early use seed should be sown in the hot-bed in drills 4 or 5 inches apart and half an inch deep. For an early crop in the open ground select a sandy soil and a warm south border, under the shelter of a fence, or building, if possible. A load of fresh sandy loam from the woods is better for the radish crop. As soon as the first leaves appear sprinkle with soot or ashes to save from the little turnip fly. One ounce will sow 150 feet of row.

The secret in sowing good radishes consists chiefly in the observance on the part of the grower of three points. First, they should be grown on light, quick soil. Second, they should be given plenty of water, and last, but not by any means least, the right kind of seed should be sown. Radishes grow very quickly, and if not supplied with plenty of water are apt to be pithy.

## SUMMER RADISHES



## Early Scarlet Globe

Early Scarlet Globe. Somewhat larger than the early turnipshaped varieties, being globular in form, and more of a medium between the early button and the later long sorts.

Is heat-resisting and of a brilliant scarlet color. Very showy. Pkt., 10c.; oz., 15c.; 1/4 1b., 40c.; 1b., \$1.00; 10 lbs., $\$ 9.00$.

Crimson Giant. A variety combining earliness and great size. It grows much larger than other extra-early varieties, but does not become pithy, even when fully twice as large in diameter and a week older; beautiful crimson-carmine; turnip-shaped; flesh firm, crisp and tender. We recommend it for outdoor garden planting as well as for greenhouse forcing. Pkt., 10c.; oz., 15c.; 1/4 lb., 35c.; 1b., $\$ 1.00 ; 10$ lbs., $\$ 9.00$.


White Box Radish
White Box. An early variety, very popular with market gardeners. The radishes grow $11 / 2$ inches in diameter, with pure paper-white skin; crisp, mild flesh. Largely planted in the field for the earliest market crop. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} .$, 35 c .; 1b., $\$ 1.00$; 10 lbs., $\$ 9.00$.

French Breakfast. A quick growing, small, olive-shaped radish about one and one-half inches long by five-eighths to three-fourths of an inch in diameter when fully grown. The color is beautiful deep rose-scarlet except a little clear white about the tip. This is an excellent variety for planting outdoors for the home garden. Its small tops and earliness make it also desirable for growing under glass. Pkt., 10c.; oz., 15c.; $1 / 41 \mathrm{lb} ., 35 \mathrm{c}$. ; 1b., $\$ 1.00$; 10 lbs., $\$ 9.00$.

Early Scarlet Turnip - White Tipped. For many years we have found this variety to be the most popular of all among private gardeners, and unsurpassed as a Table Radish, where by reason of the strong contrasting colors of the root it makes a most attractive appearance. The flesh is crisp, white and tender and extremely mild. Pkt., 10c.; oz., 15 c. ; $1 / 4 \mathrm{lb}$. , 35c.; 1b., $\$ 1.00$; 10 lbs., $\$ 9.00$.
Chartier or Sheppard. A distinct and exceedingly attractive sort; a clear rose-colored long Radish, shading into pure waxy white at the tips, attains large size. Perhaps one of the best Early Summer Radishes for the open ground. Grows very fast; ready for use or market early; keeps crisp a long time. Should not be sown until the ground is warm. Pkt., 10c.; oz., 1Ec.: $1 / 4 \mathrm{lb} ., 35 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.00 ; 10 \mathrm{lbs} ., \$ 9.00$.
Half Long Deep Scarlet. This variety, appreciated by many, is just the right size for table use, not too large, always tender and crisp. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{1 b} ., \mathbf{3 5 c}$.; 1b., $\$ 1.00 ; 10$ lbs., $\$ 9.00$.
Long Brigbtest Scarlet or Cincinnati Market. The brightest and handsomest long scarlet Radish grown. Fit for use in twenty-five days from the time of sowing, and remains in good condition until fully grown. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$.; 1b., $\$ 1.00$; 10 lbs., \$9.00.

White Icicle. An entirely distinct long slender, pure white variety. It is without doubt the earliest and finest long white Radish in existence. Ready for use fully as early as Long Scarlet Top, with less foliage, rendering it most desirable for forcing. In the open ground the roots continue brittle, crisp, and mild, until they are fully as large as those of the Long Bright Scarlet. The Icicle is perhaps superior to the finest long red ones. Roots 4 inches in length and half an inch in diameter; they retain their crispness and fresh, mild flavor until fully 6 inches long and an inch in diameter. Pkt., 10c.; oz., 15c.; 1/4 1b., 35c.; $1 \mathrm{~b} ., \$ 1.00 ; 10 \mathrm{lbs} ., \$ 9.00$.

Early Long Scarlet Short Top (Improved). The best standard variety for private gardens or market use, is brittle and crisp, and of quick growth; color bright scarlet, small top and is uniformly straight and smooth.


White Icicle
Pkt., 10c.; oz., 15c.; 1/4 lb., 35 c . ; 1b., $\$ 1.00$; $10 \mathrm{lbs} ., \$ 9.00$.

White Strasburgh. A very popular variety. Pure white. Of tender quality and remains good for a long while. Matures in 30 to 35 days. Pkt., 10c.; oz., 15c.; $1 / 4$ lb., 35c.; 1b., $\$ 1.00$; 10 lbs., \$9.00.

## WINTER RADISHES

( 50 to 75 days, according to variety.)
Winter Radishes are not appreciated as much as their merit warrants. They are easily grown, have few insect enemies and can be easily preserved through the Winter, and there is no vegetable which furnishes a more acceptable relish. While quick growth is not so essential for these as for the earlier sorts, they do best on a rich soil which has been made as fine and friable as possible. Sow late in Spring or during the Summer in rows 2 feet apart and thin the plants about four to the foot.

China Rose Winter. Form conical, of a bright rose color, flesh firm and pungent flavor. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$. , 40c.; 1b., $\$ 1.25$; 10 lbs., $\$ 11.50$.

White China Winter. This Winter Radish is as solid and juicy as an apple; pure white flesh and delicious flavor-a very choice variety. Sown any time after July 1 to the middle of August. It will keep all Winter in prime condition, mild in flavor, brittle. Never gets woody as do most Winter varieties. Market gardeners have found it to be a splendid seller and have alwavs made money with it. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.; lb., $\$ 1.10 ; 10$ lbs., $\$ 10.00$.

Round Scarlet China. A round scarlet radish of unusual merit especially valuable for sowing at intervals throughout the entire Spring, Summer and Fall seasons. It remains solid and sweet at all stages of its growth. At the size of a baseball it is as mild and brittle as when the size of a marble. This remarkable radish will mature in six weeks and the roots from Fall sowing may be so stored for Winter use. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$. , $45 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.25 ; 10 \mathrm{lbs} ., \$ 11.50$.

Round Black Spanish. An excellent Round Black Winter variety. Good keeper. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 35 \mathrm{c} . ; \mathbf{1 b} .$, $\$ 1.10 ; 10$ lbs., $\$ 10.00$.

Half Long Black Winter. This variety is intermediate in shape between the Round and the Long Black Spanish, and seems to combine the good qualities of both. The roots have black skin, crisp and pungent but well flavored white flesh. They are four to five inches long and one and one-half to two inches in diameter, sometimes approaching stump rooted form at maturity. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 45 \mathrm{c}$. ; lb., $\$ 1.25$; 10 lbs., $\$ 11.50$.

Long Black Spanish. One of the latest and hardiest long garden radishes, especially adapted for winter use. The roots are long, thick, almost black, somewhat wrinkled. The flesh is white, of firm texture, decidedly pungent but well flavored. The roots when mature are usually seven to nine inches long by two to three inches in diameter at thickest part. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 35 \mathrm{c}$. ; lb., $\$ 1.10$; $10 \mathrm{lbs} ., \$ 10.00$.

## RHUBARB

Rhubarb, also known as Pie Plant, or Wine Plant, is the earliest Spring vegetable and is grown for its leaf stalks which are extensively used for pies and sauce.
Rhubarb succeeds best in deep, somewhat retentive soil and the richer this is and the deeper it is stirred, the better. Sow in drills an inch deep and thin out the plants to six inches apart. In the fall transplant into very highly manured and deeply stirred soil, setting them four to six feet apart each way and give a dressing of coarse manure every spring. The stalks should not be plucked until the second year. When a blossom stalk appears, it should be cut back well into the ground and the plant never allowed to exhaust itself by running to seed.

Victoria. A good market sort, with beautiful red stalks. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$.; lb., $\$ 1.50$.

# RHUBARB ROOTS (Victoria) <br> (Ready from October to May 15th.) Large Clumps-Ea., 9c.; doz., $\$ 1.00$. <br> Extra Large Clumps-Ea., 16c.; doz., \$1.75. <br> In lots of 100 or more, price on application. 

## SALSIFY

(Vegetable Oyster)
Sow early in the Spring, in deeply dug and richly manured soil, in drills 18 inches apart. Keep clear of weeds, and when up a few inches, thin out, so as to stand 4 or 5 inches apart. This is a hardy vegetable and can remain in the ground all Winter for early. Spring use, but should be taken out before they start growing.

Mammoth Sandwich Island. Preferred on account of its larger size, and absence of stringiness. Resembles a good-sized parsnip and is very mild and delicately flavored. Pkt., 10c.; oz., 20c.; $1 / 4$ lb., 70c.: lb., $\$ 2.50$.

## SPINACH

The spinach is very hardy, wholesome and palatable, and makes a delicious dish for greens. Should be planted in rich ground. Sow in drills one foot apart, and commence thinning out when the leaves are an inch wide. For early Spring use, the seed should be sown middle of Autumn, and will require through the Winter a slight protection of leaves or straw. For Spring and early Summer use, sow as early as the ground can be tilled and at short intervals, if a succession is desired. Edible in 40 to 60 days.


Bloomsdale-Savoy Leaf
Bloomsdale. A superior variety of Bloomsdale or Norfolk Savoy-leaved spinach, having a heavy re-curved bloated leaf of symmetrical form. Fine for outdoor planting in Spring or Fall, or under glass. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$., 25 c .; 1b., 60 c .

Long Standing. New large crimped fleshy leaved variety; stands two weeks longer than any other variety before running to seed. Best kind of seed sowing. Pkt., 10c.; oz., 15c.; 1/4 1b., 25c.; 1b., 60c.
New Zealand. This variety endures heat and drought; excellent for Summer use; the leaves are small and thick. It is an enormous yielder, growing upright, one sowing can be picked from the entire Summer, a very distinct variety. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 30 \mathrm{c} . ; 1 \mathrm{l} ., 75 \mathrm{c}$.

King of Denmark. Also known as "Antvorskov." This new variety is undoubtedly the most valuable introduction of spinach in recent years. Although the plants are ready for use almost as soon as the medium early sorts they remain in good condition from a week to two weeks after all other varieties have gone to seed. The plants are of rapid growth, resemble the Long Season in type, but leaves are more crumpled or blistered and are of darker green color. The leaves are thick, stand well after cutting and are of good quality. We believe this variety will in a few years be one of the leading sorts as its distinctive qualities are sure to win favor for it from both the home and market gardener. Pkt., 10c.; oz., 15 c .; $1 / 4 \mathrm{lb} ., 25 \mathrm{c}$.; 1b., 60 c .

## SQUASH



Early White Bush (or Patty Pan) popular sorts. Pkt., 10c.; oz., 15c.;

Cultivate same as cucumbers or melons. The Summer varieties should be planted 4 or 6 feet apart each way, and the Winter sorts 8 feet. Three plants are sufficient for a hill.

Early White Bush (Patty Pan). A wellknown variety of dwarf habit and upright growth. Surface comparatively smooth. Color, greenishwhite while young; then changing to creamy white. One of the best and most $1 / 41 \mathrm{~b} ., 35 \mathrm{c} . ; 1 \mathrm{~b} ., \$ 1.00$.

Long White or English Vegetable Marrow. This is similar to the Cocozella, but rather later in season and the fruits are much larger in size. Strong running vines bearing fruits with creamy white, smooth skin. Pkt., 10c.; oz., 15c.; $1 / 41 \mathrm{lb} ., 35 \mathrm{c}$. ; 1b., \$1.00.

Golden Custard Bush Squash. Similar in shape to White Bush, but skin is a rich golden-yellow and flesh pale yellow. Pkt., 10c.; oz., 15c.; 1/4 1b., 40c.; 1b., \$1.25.

Golden Summer Crook-Neck. 40 days. The best of the Summer squashes, gold color, profusely covered with warty excrescences and of very superior flavor. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$., 35 c .;


## Golden Summer Crookneck

Fordhook Squash. This is a most desirable squash for either summer or winter use. The vines are of strong, vigorous growth and wonderfully productive. Squash oblong in form, eight or ten inches in length, slightly ridged; smooth, thin, yellowish skin; flesh very thick and of a light yellow color. If gathered young for cooking, no other squash approaches it in flavor, while if allowed to ripen on the vine they can be stored and will keep in excellent condition until late the following June. Either for baking like sweet potatoes or making pies during the winter, the squash is very fine. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb}$., 40c.; 1b., \$1.25.


## Cocozella di Napoli (Italian Vegetable Marrow).

Cocozella di Napoli (Italian Vegetable Marrow). Fruit large, oblong shaped, dark green at first, but as they mature become marbled with yellow and lighter green stripes. The young fruit when sliced and fried constitutes a vegetable delicacy superior to egg-plant. Pkt., 10c.; oz., 15c.; $1 / 4$ lb., 40c.; 1b., \$1.25.

## Winter Squashes

Delicious. A very early winter variety of medium size; shell moderately hard, very thin; flesh thick, fine grained and of a light yellow color. It varies somewhat in color and form, usually oval-shaped, with green, smooth skin, sometimes slightly mottled. Pkt., 10c.; oz., 15c.; 1/4 1b., 40c.; 1b., \$1.25.

Boston Marrow (or Squash Pumpkin). A fall and winter variety, very popular, oval form, thin reddish skin, when ripe, bright orange color. Excellent for pies, very sweet, and a heavy cropper. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 30 \mathrm{c}$.; 1b., 80 c .

Golden Hubbard. A very superior variety, flesh bright orange-yellow; dry, sweet and rich flavored, good keeper, boils or bakes exceedingly dry. Pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb} ., 50 \mathrm{c}$. ; 1b., \$1.50.

Warted Hubbard. This is, in quality, one of the best winter sorts. It is attractive on the market and a ready seller. Very dark green, and flesh is dry and sweet. Very hard shell, which insures good keeping qualities. It is considered an improvement on the old type of Hubbard on account of its warted skin. Pkt., 10c.; oz., 20c.; 1/41b., 50c.; 1b., \$1.50.


Hubbard

## TOMATO

Culture-For very early fruit, the seed should be sown in a hot-bed about the first week in March, in drills five inches apart and one-half inch deep. Later sowings may be made until the last of April. (Sufficient plants for a small garden can be started by sowing a few seeds in a shallow box or flower pot and placing in a sunny window in the house.) When the young plants are 3 to 4 inches high, they should be set 4 to 5 inches apart in another hotbed or cold-frame, or transplanted into small pots, allowing a single plant to a pot. Expose to the air as much as possible to harden them for planting out. Water freely at the time of transplanting into the open ground and shelter from the sun a few days until the plants are thoroughly established. Cultivate thoroughly as long as the vines will permit, but the last two or three workings of the soil should be very shallow or the crop may be badly injured.

Bonny Best. The fruits of this desirable early sort are most attractive in shape and color. The crop ripens more uniformly than any other early scarlet fruited sort, and is of superior solidity and interior color. The vines are vigorous and produce a good crop of exceptionally round and deep fruits, bright deep scarlet in color and of very good quality. One of the best for gardeners whose trade demands fruits of beautiful shape and color. A very good variety for the early market and home garden. Pkt., 10c.; oz., 25c.; $1 / 41 \mathrm{lb} ., 85 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 3.00$.

Ponderosa. Unquestionably one of the largest tomatoes grown. The vines are vigorous, producing a very large stalk and an unusually thick stem, which is accounted for in the great size and weight of the fruit. It is one of the best flavored sorts grown, almost solid, and contains scarcely any seed. The fruit, when ripe, is cardinal red, and on account of its compact structure will keep longer than any other sort. Pkt., 10c.; oz., 45c.; $1 / 4 \mathrm{lb} ., \$ 1.50$; 1 b ., $\$ 5.00$.

Dwarf Stone (Tree Tomato). Large, red, smooth and solid; the stalk is upright with very dense foliage protecting fruit from heat of sun. A most desirable tomato. Pkt., 10c.; oz., 30c.; $1 / 4 \mathrm{lb} ., \$ 1.00 ; 1 \mathrm{lb} ., \$ 3.50$.

Earliana. One of the new standards of recent introduction, ripening ahead of other and later varieties, medium in size, fruit growing in clusters. Very solid, and a good acquisition. Pkt., $10 \mathrm{c} . ;$ oz., $25 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.; 1b., $\$ 3.00$.
Chalk's Early Jewel. The largest, smoothest and finest flavored, extra early bright red tomato. It is a heavy cropper, with tomatoes of large size and sweet flavor, producing throughout the season. The plants are of bushy, compact growth, heavily loaded with fruit. The tomatoes are of good size, just right for market; are very solid and deep through, being almost round; color bright scarlet, ripening to stem without cracks or green core. The flesh is thick, solid, of fine flavor, with few seeds. The skin is strong enough to make it a good shipping variety. Pkt., 10c.; oz., 25c.; $1 / 41$ b., 85c.; 1b., $\$ 3.00$.


Red Stone
Improved Red Stone. One of the largest and most solid main crop or late bright red varieties. It is unsurpassed for slicing and canning. The vines are large, vigorous and very productive. The fruits are bright deep scarlet, oval and very deep, exceptionally smooth and uniform in size. Pkt., 10c.; oz., $25 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.; 1b., $\$ 3.00$.

Greater Baltimore. An excellent main-crop sort, producing large, solid, smooth fruit of a brilliant red color. It ripens evenly to the stem and is entirely free from ridges. Pkt., 10c.; oz., 25 c.; $1 / 4$ 1b., 85 c .; 1b., $\$ 3.00$.

John Baer. A few days earlier than Earliana, it yields a much heavier crop of larger, more uniform and more attractive fruits-generally returns the biggest profits of any extra early variety. Pkt., $10 \mathrm{c} . ;$ oz., $30 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., \$ 1.00 ; 1 \mathrm{lb} ., \$ 3.50$.

Golden Queen. Well known as one of the best; vines of medium size, but producing large quantities of fruit, which is large, smooth, and bright yellow in color. Pkt., 10c.; oz., 30c.; $1 / 4$ 1b., $\$ 1.00$; 1b., $\$ 3.50$.

## SMALL FRUITED VARIETIES

Yellow Plum. Fruit plum-shaped, of a clear, deep yellow color; flesh yellow and finely flavored. Pkt., 10c.; oz., 40c.; $1 / 4 \mathrm{lb} ., \$ 1.25$; 1b., $\$ 4.50$.

Red Pear. Used for preserves and to make "tomato figs." Fruits bright red, distinctly pear shaped and of excellent flavor. Our stock is the true small pear shaped. Pkt., 10c.; oz., 40c.; $1 / 4$ 1b., $\$ 1.25$; 1b., $\$ 4.50$.

Yellow Pear. Fruits similar to the Red Pear, but of rich, clear, yellow color and quite distinct from the variety sometimes sold under this name. Pkt., 10c.; oz., 40c.; 1/4 1b., \$1.25; 1b., \$4.50.

Yellow Husk, or Ground Cherry. Used for preserving and eating from the hand. The seed we offer is that of the true Yellow Ground Cherry, not the purple-fruited sort which is scarcely edible. Excellent for making pies. Pkt., 10c.; oz., $40 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., \$ 1.25$; 1b., $\$ 4.50$.

Peach. Fruit resembles a small peach in size and shape. The color is a light terra cotta red. Skin and flesh thick. Used principally for preserving and table decoration. Pkt., 10c.; oz., 40c.; $1 / 4 \mathrm{lb}$., $\$ 1.25$; 1b., $\$ 4.50$.

Red Cherry. Fruit the size of a large cherry, perfectly round and smooth. Used for preserving. Pkt., 10c.; oz., 40c.; $14 \mathbf{1 b} .$, $\$ 1.25$; 1b., $\$ 4.50$.

## TOMATO PLANTS

## Ready about May 1st.

Large quantities matter of correspondence.
Improved Stone, Bonny Best, Greater Baltimore, Chalk's Early Jewel Dwarf Stone, Sparks' Earliana.

Pot Grown. Doz., 70c.; 100, $\$ 5.00$.
Transplanted. Doz., 40c.; 100, $\$ 1.50$.
All plants packed in live moss, to insure long shipment.

## TOBACCO

Culture-A very clean piece of land is best for the tobacco plant beds, hence it is customary to burn a piece of land in the woods for same. This destroys grass, weeds and insects, adds fertility through the action of the wood ashes, and leaves the ground in good order. The seeds are sown about February, and protected by plant-bed cloth to keep off tobacco flies. When large enough and weather is settled (about June), set the plants out in highly manured or fertilized soil in $31 / 2$ foot rows, 3 feet between the plants. Constant care must be given, cultivating, suckering, worming, etc. Methods of curing differ according to the variety and color, whether to be sun or flue-cured, etc.

Choice Havana. An Americanized Havana, used for cigar purposes, although sometimes used as a manufacturing sort. Has a very large, long, fine quality leaf; very early; making two crops a season in some sections. Best adapted to chocolate or rich gray soils. Pkt., 10c.; oz., 60c.; $1 / 4 \mathrm{lb} ., \$ 1.75$.

Connecticut Seed Leaf. Our seed is Connecticut grown; a stocky plant; leaves not very long, but of good width; suitable for cigar fillers. Pkt., 10c.; oz., 50c.; $1 / 4 \mathrm{lb}$., $\$ 1.50$.

## TURNIP

Cultural Directions. Spring sowings should be made as early as possible so that the turnips may make their size before hot weather; otherwise they will become tough and bitter. For spring sowings there is nothing equal to the Purple Top Strap Leaf. For the regular crop, sow the early kinds in July and August, the later sorts during August or September. Sow either broadcast or in drills two feet apart, and when well up, thin out
 to prevent overcrowding. Rutabagas should be sown in July or early in August and earthed up as they grow.

Purple Top White Globe. An excellent variety, globe shaped and heavy cropper;thisvariety is rapidly taking the lead a mong growers for market garden purposes; it is also a good one for stock. Pkt., 10c.; oz., 15c.; 1/4 1b., 20c.; 1b., 75c.

Golden Ball or Orange Jelly. A small yellow turnip of second size. Early and a good keeper. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 25 \mathrm{c} . ; 1 \mathrm{lb} ., 75 \mathrm{c}$.
Yellow Aberdeen (Green Top). This is a very nutritious turnip; flesh pale yellow, tender and sugary; is a good keeper, hardy and productive. It is an old favorite, and for stock purposes hard to beat. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 25 \mathrm{c} . ; 1 \mathrm{lb} ., 75 \mathrm{c}$.

Yellow Aberdeen (Purple Top). Very hardy and productive, a good keeper; globe shaped. Color pale yellow, with purple top. Very firm in texture, and closely resembling the rutabaga in good keeping qualities. Good either for table or stock. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 25 \mathrm{c}$.; 1b., 75c.


## Purple Top Flat (Strap Leaf)

Purple Top Flat (Strap Leaved). An early variety, very extensively used for the table. The leaves are few and upright in growth. The roots are flat, of medium size, purple or dark red above ground, white below. The flesh is white, fine-grained and tender. Roots when in best condition for table use are about 2 to 3 inches in diameter, but can be grown much larger for stock feeding. This is the standard variety, and there is none better for general purposes. Pkt., 10c.; oz., 15c.; 1/4 1b., 25c.; 1b., 75c.

Cow Horn. This variety is carrot-shaped, and grows nearly half out of the ground; is pure white, except slight shade of green at top. It is well flavored, of rapid growth, and seems to be increasing in favor every year. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{1 b} ., 25 c$.; 1b., 75c.

Yellow, or Amber Globe (Strap Leaved). This is one of the best of the rough leaved sorts, for either table use or for stock; yellow, fine grained and sweet; hardy, keeps well, is a good cropper, and grows to a very large size. Pkt., 10c.; oz., 15c.; 1/41b., 25c.; 1b., 75c.

Seven Top. Cultivated extensively in the South for tops, which are used for greens. It is very hardy and will grow all winter, but does not produce a good root and isonly recommended for the tops. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{1 b} ., 35 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.00$.

## RUTABAGAS

## SWEDISH TURNIP

Improved Purple Top Yellow Swede. This is the standard and most important now cultivated for stock purposes; noted for rapid growth, large size and nutritious quality, and cannot be too highly recommended. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 25 \mathrm{c}$.; $1 \mathrm{~b} ., 75 \mathrm{c}$.


Purple Top Yellow Globe
Kelway's Perfect Model (Purple Top Yellow Globe). We cannot speak too highly of this new but justly celebrated Swede brought out by Kelway, being a fresh selection of a heavy cropping rutabaga with a small purple top, free from that stringiness found in some. Tender and sweet, the absolute acme of perfection.

Although a long keeping variety, it is remarkable for being the first in coming to maturity.

Market gardeners should not neglect the opportunity to secure this money maker. Pkt., 10c.: oz., 15c.; $1 / 41 \mathrm{lb} ., 40 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.25$.

## HERBS

Most of the varieties of herbs thrive best on sandy soil and some are stronger and better flavored when grown on that which is rather poor. In all cases the soil should be carefully prepared and well cultivated, as the young plants are for the most part delicate and easily choked out by weeds.

Sow as early as the ground can be made ready, in drills 16 to 18 inches apart, taking pains that the soil is fine and pressed firmly over the seed, or they may be planted as a second crop-the seeds sown in beds in April and the plants set out in June. Most of them should be cut when in bloom, wilted in the sun and thoroughly dried in the shade.

Those marked with $\left(^{*}\right)$ are perennial, and when once obtained in the garden, may be preserved for years with a little attention.

ANISE. An annual herb cultivated principally for its seeds, which have a fragrant, agreeable smell and a pleasant taste; used medicinally for aromatic cordials, colic and nausea. The leaves are sometimes used for garnishing and flavoring. Plant of slender upright growth with deeply cut foliage; flowers small, yellowish-white, borne in large loose umbels. Pkt., 10c.; oz., 15 c .; $1 / 4 \mathrm{lb} ., 50 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.50$.

BASIL, SWEET. A hardy, aromatic annual. The seeds and stems have a strong flavor and are used in soups and sauces. Plant about eighteen inches high, branching, with ovate toothed leaves; flowers white or bluish-white in leafy terminal racemes or spikes. Pkt., 10c.; oz., 15c.; $1 / 4$ 1b., 50c.; lb., $\$ 1.75$.

CARAWAY. A well known herb, cultivated for its seeds, which are used in confectionery, cakes, etc. The leaves are sometimes used in soups, for flavoring liquors and for colic in children. Plant $11 / 2$ to 2 feet high, with finely cut foliage and clusters of small, white flowers. Plants never seed till the second year. Pkt., 10c.; oz., 15c.; 1/4 1b., 30c.; lb., 75c.

## CHERVIL. See page 18.

CORIANDER. A hardy annual cultivated for its seed, which has an agreeable taste and is used in confectionery and to disguise the taste of medicine. Gather on a dry day, bruising the stems and leaves as little as possible, for when injured they have a disagreeable odor which they impart to the seed. Plant slender, 2 to $21 / 2$ feet high, strong smelling, with smooth, finely cut foliage and small white flowers. Pkt., 10c.; oz., 15c.; 1/4 1b., 30c.; 1b., 75c.
*CATNIP OR CATMINT. A hardy perennial, the leaves of which are used for medicinal purposes. An excellent tonic for cats. Pkt., 15c.; oz., 75c.

DILL. An annual of aromatic odor and warm pungent taste. Its seeds are used for seasoning. It possesses medicinal properties but its largest use is for making Dill pickles. Plant branching, 2 to 3 feet high; leaves very much cut into threadlike segments. Pkt., 10c.; oz., 15c.; $1 / 4 \mathbf{l b} ., 25 \mathrm{c} . ; 1 \mathrm{lb} ., 75 \mathrm{c}$.

FENNEL, Florence. The seeds of this aromatic herb have a pleasant taste, and are sometimes used in confectionery, also in various medicinal preparations. The young shoots are sometimes eaten raw and are used in salads, soups and fish sauces. Plant very branching, 2 to 4 feet high, with dense thread-like foliage; flowers light yellow in large loose umbels. Seed oval. Pkt., 10 c .; oz., 15 c .; $1 / 4 \mathrm{lb} ., 45 \mathrm{c} . ; 1 \mathrm{~b} ., \$ 1.50$.
*HOREHOUND. A perennial herb with an aromatic odor and a bitter, pungent taste. It is a tonic and enters largely into the composition of cough syrups and lozenges. Laxative in large doses. Will thrive in any soil but is stronger if grown on light, poor land. Plant spreading, one to two feet high; leaves ovate, roughened, covered with whitish down; flowers small, white, borne at axils of leaves. Pkt., 10c.; oz., 40c.; $1 / 4 \mathrm{lb} ., \$ 1.10$; lb., $\$ 4.00$.
*PENNYROYAL. Leaves are used for seasoning. It also has medicinal properties. Pkt., 15c.; $1 / 2$ oz., 50 c .
*LAVENDER. A hardy perennial, growing about two feet high. It is used for the distillation of lavender water or dried and used to perfume linen. It should be picked before it becomes dry and hard, and dried quickly. The seed is of rather slow and uncertain germination. Plant erect, with slender grayish-green leaves and small violet-blue flowers. Pkt., 10c.; oz., 30c.; $1 / 4 \mathrm{lb} ., 85 \mathrm{c}$.; 1b., $\$ 3.00$.

MARJORAM, SWEET. An aromatic herb for seasoning. The young tender tops and leaves are used green in summer to flavor broths, dressings, etc., and are also dried for winter use. Usually grown as an annual as it is not hardy enough to endure the winter of the northern states. Plant erect but branching with small oval grayish-green leaves and small purplish or whitish flowers. Pkt., 10 c .; oz., $\mathbf{3 0} \mathrm{c}$.; $1 / 4 \mathbf{1 b} ., 85 \mathrm{c}$.; 1 b ., $\$ 3.00$.

## PARSLEY. See page 26.

*ROSEMARY. A hardy perennial, with fragrant odor and a warm bitter taste. The leaves are used for flavoring meats and soups, and for medicinal drinks. Plant erect, branching with small slender leaves and small light blue flowers. The blossoms form the principal ingredient in the distillation of toilet waters. Plants do not reach a size suitable for use until the second season. Pkt., 10c.; oz., 45c.; $1 / 4 \mathrm{lb} ., \$ 1.35 ; 1 \mathrm{lb} ., \$ 5.00$.
*SAGE. One of the most extensively used herbs for seasoning. It is also believed to possess medicinal properties. Hardy perennial, about 15 to 18 inches high. Plant very branching; flowers usually blue, sometimes pink or white; leaves grayishgreen, oval, wrinkled. Cut the leaves and tender shoots just as the plant is coming into flower and dry quickly in the shade. The plants will survive the winter and may be divided. If this is done they will give a second crop superior in quality. Pkt., 10c.; oz., 30c. ; $1 / 4 \mathrm{lb}$., $\$ 1.00$; lb., $\$ 3.50$.

SAVORY, Summer. A hardy aromatic annual, 12 to 15 inches high, the dried stems, leaves and flowers of which are extensively used for seasoning, especially in dressings and soups. Plant erect, branching; leaves small, narrow; flowers small, purple, pink or white, borne in short spikes. Pkt., 10c.; oz., 15c.; 1/4 1b., 40c.; 1b., \$1.25.
*THYME. An aromatic perennial herb, eight to ten inches high, used principally for seasoning. Plant very branching with wiry foliage and small lilac flowers. Sometimes the leaves are used to make a tea for the purpose of relieving nervous headache. Sow as early as the ground will permit. Pkt., 10c.; oz., 30c.; $1 / 4$ 1b., $\$ 1.00$; 1b., $\$ 3.50$.
*WORMWOOD. A perennial plant of fragrant and spicy odor, but with intensely bitter taste. The leaves are used as a tonic, vermifuge and as a dressing for fresh bruises. Plant erect, two to three feet high, with much divided leaves and loose clusters of small light yellow flowers. It may be raised from seed, propagating by cuttings or dividing the roots. A dry, poor soil is best adapted to bring out the peculiar virtues of this plant. Pkt., 10c.; oz., 25c., 1/4 1b., 70c.; 1b., \$2.40.

## IN SEASON WE CARRY FRUIT TREES AND BERRY BUSHES IN STOCK

[^2]Raspberries-The Ranere or St. Regis and various other kinds.
Grapes-All colors, early and late.
Hedge plants-California Privet, Berberis Thunbergii, Golden Privet.

Evergreens, Roses, Shade Trees, etc.

## COMMON OR ENGLISH AND BOTANICAL NAMES OF POPULAR FLOWERS AND PLANTS <br> 

A butilon-Flowering Maple.
Achillea-Milfoil, Sneezewort.
Aconitum-Helmet Flower, Monk's
Hood. Wolf's Bane.
Acroclinium-Everlastings.
Adam's Needle-Yucca.
Adiantum-Maiden Hair Fern.
Adlumia-Allegheny Vine, Mountain Fringe.
Adonis aestivalis-Pheasant's Eye.
African Lily-Agapanthus.
Agapanthus-African Lily.
Ageratum-Floss Flower.
Agrostemma-Rose Campion.
Allegheny Vine-Adlumia.
Aloysia citriodora-Lemon Verbena.
Althaea rosea-Hollyhock.
Althaea-Rose of Sharon.
Alyssum saxatile-Basket of Gold.
Amaranthus caudatus - Love Lies Bleeding.
Amaranthus tricolor-Joseph's Coat. Amaryllisformosissima - Jacobaean Lily.
Amethyst-Browallia.
Ampelopsis Veitchii-Boston Ivy.
Anchusa-Sea Bugloss.
Anemone-Windflower.
Anthericum-St. Bruno's Lily.
Antirrhinum-Snapdragon.
Aquilegia-Columbine.
Arabis-Red Cress.
Aristolochia-Dutchman's Pipe Armeria-Sea Pink, Thrift. Artemesia absynthium-Wormwood. Asparagus Fern-Asparagus plumosus.
Asperula-Waldmeister, Woodruff.
Baby's Breath-Gypsophile.
Baby Primrose-Primula Forbesi. Bachelor's Button-Centaurea, Gomphrena, Bellis.
Balloon Vine-Cardiospermum.
Balsam-Lady Slipper.
Balsam Apple-Momordica.
Basket of Gold-Alyssum saxatile.
Beard Tongue-Pentstemon.
Bell Flower-Campanula.
Bellflower Lily-Lilium canadense.
Bellis-Bachelor's Button, English Daisy.
Bignonia-Trumpel Vine.
Black Eyed Susan-Thunbergia.
Blanket Flower-Gaillardia.
Blue Bottle-Centourea cyanus. Blue Lace Flower-Didiscus Cærulea Bluets-Centaurea cyanus.
Boston Ivy-Ampelopsis Veitchii.
Brachycome-Swan River Daisy.
Bridal Wreath-Spiraea prunifolia.
Briza-Quaking Grass.
Browallia-A methyst.
Buddleya-Butterfly Bush.
Bush Eschscholtzia-Hunnemannia.
Buttercup-Trollius.
Butterfly Bush-Buddleya.
Butterfly Flower-Schizanthus.
Buxus-Boxwood.
Cacalia-Tassel Flower.
Caladium-Elephant's Ear.
Calendula-Pot Marigold.
California Poppy-Eschscholtzia. Callirhoe-Poppy Mallow. Campanula calyc.-Cup and Saucer.
Campanula carpatica-Hare Bell.
Campion-Lychnis.
Canarybird Flower - TropaeolumCanariense.
Candytuft-Iberis.
Canna-Indian Shot.
Canterbury Bells-Campanula.
Cape Jessamine-Gardenia florida.

Cardinal Flower-Lobelia Cardinalis. Castor Oil Beans-Ricinus.
Catchfly-Silene.
Catalpa-Umbrella Tree.
Centaurea cyanus - Bachelor's Button, Cornflower, Blue Botlle, Bluets, Ragged Sailor.
Centaurea Imperialis-Sweet Sultan.
Celosia cristata-Cockscomb.
Cerastium-Snow in the Summer.
Chinese Bell Flower-Plalycodon.
Chrysanthemum frutescens - Marguerite, Paris Daisy.
Clove Pinks-Dianthus plumarius.
Cockscomb-Celosia cristata.
Coix-Job's Tears.
Columbine-Aquilegia.
Cone Flower-Rudbeckia.
Convolvulus-Morning Glory.
Coral Lily-Lilium tenuifolium.
Cornflower Aster-Stokesia.
Cornflower-Centaurea cyanus.
Cornus florida-Dogwood.
Cowslip-Primula veris.
Crane's Bill-Geranium.
Cup and Saucer-Campanula calyc.
Cycas-Sago Palm.
Cyperus-Umbrella Plant.
Cypress Vine-Ipomea Quamoclit.
Daisy-Bellis perennis.
Datura cornucopia-Horn of Plenty.
Datura-Trumpet Flower.
Delphinium-Larkspur.
Dianthus barbatus-Sweel William. Dianthus-Pinks.
Didiscus Cœrulea-Blue Lace Flower Digitalis-Foxglove.
Dimorphotheca-Orange Daisy.
Dogwood-Cornus florida.
Dolichos-Hyacinth Bean.
Dusty Miller-Cenlaurea gymnocarpa
Dusty Miller-Cineraria Marilima.
Dutchman's Pipe-Aristolochia.
Echinops-Globe Thistle.
Echinocystis-Wild Cucumber.
Edelweiss-Leontopodium.
Egyptian Lotus-Nelumbium.
Elephant Ears-Caladium.
English Daisy-Bellis.
English Primrose-Primula vulgaris.
Erianthus-Plume Grass.
Eulalia-Zebra Grass.
Euphorbia-Mexican Fire Plant. Evening Primrose-Oenothera.
Everlastings - Acroclinium, Gomphrena, Helichrysum, Rhodanthe, Xeranthemum.
Everlasting Pea-Lathyrus latifolius.
Fairy Lily-Zephyranthes.
Feather Grass-Siipa.
Feverfew-Matricaria.
Flax-Linum.
Fleur de lis-Iris germanica.
Floss Flower-Ageratum.
Flowering Maple-Abutilon.
Flowering Tobacco-Nicotiana.
Forget-me-not-Myosofis.
Forsythia-Golden Bell.
Four o'Clocks-Mirabilis.
Foxglove-Digitalis.
Fuchsia-Lady's Ear Drop.
Gaillardia-Blanket Flower.
Garden Heliotrope-Valeriana. Gardenia florida-Cape Jessamine.
Geranium-Crane's Bill.
Gilliflower-Stocks.
Globe Amaranth-Gomphrena.
Globe Flower-Trollius.
Globe Thistle-Echinops.
Gold Dust-Alyssum saxatile.
Golden Bell-Forsythia.
Golden Feather-Pyrethrum aureum. Golden Rod-Solidago.
Gomphrena-Everlastings, Globe Amaranth, Bachelor's Button.
Grass Pinks-Dianthas plumarius.
Gynerium-Pampas Grass.
Gypsophila-Baby's Breath.

Hare Bell-Campanula carpatica. Heart's Ease-Pansy.
Helenium-Sneezewort.
Helianthus-Sunflower.
Helichrysum-Strawfower.
Helmet Flower-Aconitum.
Hesperis-Sweet Rocket, Rocket.
Hollyhocks-Althaea rosea.
Honesty-Lunaria.
Hops-Humulus.
Horn of Plenty-Datura cornucopia.
Hunnemannia-Bush Eschscholzia.
Hyacinth Bean-Dolichos.
Ice Plant-Mesembryanthemum.
Indian Shot-Canna.
Ipomea noctiflora-Moonflower.
Ipomea Quamoclit-Cypress Vine.
Jacobaean Lily-A maryllis formos. Japan Pinks-Dianthus Heddewigii.
Jerusalem Cherry - Solanum capsicastrum.
Job's Tears-Coix.
Joseph's Coat-A maranthus tricolor.
Kalmia latifolia-Mountain Laurel. Kenilworth Ivy-Linaria cymbalaria. Kochia-Mexican Fire Bush, Summer Cypress.
Kudzu Vine-Pueraria.
Lady's Ear Drop-Fuchsia.
Lady's Slipper-Balsam.
Larkspur-Delphinium.
Lathyrus latifolius-Everlasting Pea.
Lemon Verbena-Aloysia citriodora.
Leontopodium-Edelweiss.
Lilac-Syringa.
Lily of the Valley-Convallaria.
Lobelia cardinalis-Cardinal Flower. Love Grove-Nemophila.
Love Grove-Nemophila.
Love in a Mist-Nigella.
Love Lies Bleeding-Amaranthuscaudatus.
Linaria cymbalaria-Kenilworth Ivy.
Lunaria-Honesty, Moonwort.
Lychnis-Ragged Robin, Rose Campion.

Maiden Hair Fern-Adiantum.
Mallow-Hibiscus.
Marguerite-Chrysanthemum frutescens.
Marigold-Tagetes.
Marshmallow-Hibiscus.
Marvel of Peru-Mirabilis.
Matricaria-Feverfew.
Mesembryanthemum-Ice Plant.
Mexican Fire Bush-Kochia.
Mexican Fire Plant-Euphorbia.
Michaelmas Daisy-Aster perennis.
Mignonette-Reseda.
Mimosa-Sensitive Plant.
Mimulus moschatus-Musk Plant.
Mirabilis - Four o'Clocks, Marvel of Peru.
Mock Orange-Philadelphus,
Momordica Balsamina - Balsam
Apple.
Monk's Hood-A conitum.
Moonflower-Ipomea noctiflora.
Moonflower-Ipomea
Moonwort-Lunaria.
Morning Glory-Convolvulus.
Moss Pink-Phlox subulata.
Mountain Fringe-Adlumia.
Mountain Laurel-Kalmia latifolia.
Mourning Bride-Scabiosa.
Musk Plant-Mimulus moschatus.
Myosotis-Forget-me-nol.
Myrtle-Vinca minor.
Nemophila-Love Grove.
Nicotiana-Flowering Tobacco. Nigella-Love in a Mist.

Oenothera-Evening Primrose.
Orange Daisy-Dimor photheca.
Ox-Eye-Adonis vernalis.
Painted Tongue-Salpiglossis.
Pampas Grass-Gynerium.
Paris Daisy-Chrysanthemum frutescens.
Passiflora-Passion Flower.
Peach Bells-Campanula persicifolia.
Pentstemon-Beard Tongue.
Pentstemon-Beara.
Periwinkle-Vinca.

Pr

Phalaris-Ribbon Grass.
Pheasant's Eye-Adonis aestivalis.
Phlox drummondii-Flame Flower.
Phlox subulata-Moss Pink.
Pincushion Flower-Scabiosa.
Pinks-Dianthus.
Platycodon-Chinese Bell Flower.
Plume Grass-Erianthus.
Polyaus-Primula elatior.
Poppy Mallow-Callirhoe.
Poppy Mallow-C
Poppy-Papaver.
Poppy-Papayer.
Pot Marigold-Calendula.
Pueraria-Kudzu Vine.
Pyrethrum aureum-Golden Feather.
Quaking Grass-Briza.
Rag Gourd-Cucumis acutangulus.
Ragged Robin-Lychnis.
Ragged Sailor-Centaurea cyanus.
Red Hot Poker Plant-Tritoma.
Reseda-Mignonette.
Rhodanthe-Everlastings.
Ribbon Grass-Phalaris.
Rock Cress-Arabis.
Rocket-Hesperis.
Rose Campion-Agrostemma.
Rose Campion-Lychnis.
Rose of Sharon-Althaea.
Rudbeckia-Cone Flower.
Sago Palm—Cycas.
Salpiglossis-Painted Tongue.
Satin Flower-Godetia.
Scabiosa-Mourning Bride.
Scabiosa-Pincushion Flower.
Scarlet Sage-Salvia splendens. Schizanthus-Butterfly Flower.
Sea Lavender-Statice.
Sensitive Plant-Mimosa.
Silene-Catchfly.
Snapdragon-Antirrhinum.
Sneezewort-Helenium.
Sneezewort-A chillea.
Snowball-Viburnum.
Snow in the Summer-Cerastium.
Snow on the Mountain-Euphorbia.
Solanum capsicastrum - Jerusalem.

## Cherry.

Solidago-Golden Rod.
Speedwell-Veronica.
Spider Plant-Cleome.
Statice-Sea Lavender.
Stipa-Feather Grass.
Stocks-Gilliflower.
Stokesia-Cornflower Aster.
Strawflower-Helichrysum.
Summer Cypress-Kochia.
Sunflower-Helianthus.
Sunfower-Heliver Daisy-Brachycome.
Swan River Rocket-Hesperis.
Sweet Rocket-Hesperis.
Sweet Sultan-Cenlaurea Imperialis.
Sweet Sultan-Cenlaurea Imperialis
Sweet William-Dianthus barbatus.
Syringa-Lilac.
Tagetes-Marigold.
Tassel Flower-Cacalia.
Thunbergia-Black Eyed Susan.
Tobacco-Nicotiana.
Tritoma-Red Hot Poker.
Trollius-Buttercup.
Trumpet Flower-Datura.
Trumpet Vine-Bignonia.
Tufted Pansies-Viola cornuta.
Umbrella Plant-Cyperus.
Umbrella Tree-Catalpa.
Viburnum-Snowball.
Vinca minor-Myrtle.
Vinca-Periwinkle.
Viola cornuta-Tufted Pansies.
Virgin's Bower-Clemalis.
Virginia Creeper-Ampelopsis quinquefolia.

Waldmeister-Asperula.
Wallfower-Cheiranthus.
Wild Cucumber-Echinocystis.
Windflower-A nemone.
Woodruff-A sperula.
Wormwood-Artemisia absynthium.
Xeranthemum-Everlastings.
Yarrow-A chillea.
Youth'and Old Age-Zinnia.
Zebra Grass-Eulalia.
Zephyranthes-Faliry Lily.
Zinnia-Youth and Old Age.

[^3]
# MINGLE'S SELECTED FLOWER SEEDS 

Plant flowers for your table, flowers for your home, and flowers for your friends. You can never have too many flowers. An abundance of pretty bouquets can be had with so little work and so little expense that every home should have the cheering influence of flowers. The culture of many is so very simple that anyone can succeed. Flowers are divided into three classes: Annuals which produce flowers, mature, and die in one season. Biennials, which grow from seed one year and bloom and die the second year. Many of these will produce flowers the first year if sown early enough. Perennials, which live for several years producing flowers annually after the first season. These are grown from seed and also by setting out cuttings, slips, or divisions of roots. Perennials are very satisfactory as they live for many years and produce large quantities of very beautiful flowers. Culture Directions are given on the back of each packet. A general rule is to cover the seed to a depth of about four times the diameter of the seed. Mingle's Flower Seeds are assembled from all parts of the world and you will find in the following pages a very complete assortment of the very best varieties.

## ACHILLEA (Milfoil or Yarrow)

Ptarmica-"The Pearl." Large double pure white flowers borne in great profusion from Spring until frost. Splendid cut flower for vases. Perennial. Pkt., 10c.

## ACROCLINIUM (Everlasting)

Very pretty summer flowering annual plants for garden decoration. Flower cup-shaped, daisy-like in white and rose shades. These are the "Immortelles" so desirable for winter bouquets. Height 1 foot.

Culture. Sow the seed outdoors when all danger of frost is over. The young plants should be thinned to 4 inches apart. Roseum fl. pl. Double Rose. . . . . . . . . . . . . . . . . . . . Pkt., 10c. " "، " " White.................... " " "

African Golden Daisy. See Dimorphotheca, page 44.

## AGERATUM <br> (Floss Flower)

One of the best summer flowering annuals, very profuse bloom from early summer till frost. Very satisfactory as a bedding plant because their flowers are not injured by rain nor do their colors fade.

Culture. Sow in frames, or sunny window and when warm weather sets in transplant to the open ground, setting the plants 12 inches apart in open border. Seed may be sown in open ground when danger of frost is past.

Blue Perfection. Large heads of deep amethyst blue compact growth, splendid bedder, height about 10 inches. Pkt., 10c.; 1/4 oz., 25c.
Little Blue Star. A variety of very dwarf and even growth plants about 4 to 5 inches high, densely covered with light blue flowers. Pkt., 20c.
Imperial Dwarf White. Pure white, very fine for borders or beds. Height about 8 inches. Pkt., 5 c .; $1 / 4 \mathrm{oz}$., 20 c .

Dwarf Mixed Imperial. Pkt., 10c.; 1/4 oz., 25c.

## AGROSTEMMA

An attractive free flowering hardy perennial, easy culture, producing crimson flowers on long stems like a single pink. Blossoms the first season.

Culture. Sow in open ground from early spring to summer. Thin out plants to 6 inches apart.

Coronaria-(Rose Campion.) Bright crimson flowers, silverywhite foliage. Pkt., 10c.

## ALYSSUM <br> (Mad Wort)

A fragrant hardy annual, bearing spikes of small white flowers in great profusion throughout the summer and autumn. Unsurpassed for borders, hanging baskets, and rock gardens.

Culture. In the garden. Sow the seeds thickly so as to form masses early in the spring or even the previous autumn. For winter bloom sow late in August and thin the seedlings to about a dozen to a basket. After the first flowers fade cut back and others will come.


Border of Alyssum
Maritimum. (Sweet Alyssum.) Pure snow-white flower of delicious fragrance. Blooms from early spring until frost. Height, 9 inches. Pkt., 10c.; 1/4 oz., 20c.; oz., 50c.

Procumbens. (Little Gem or Carpet of Snow.) A very pretty dwarf variety, compact growth only. 5 inches high. A solid mass of snow-white flowers from early summer until A solid mass of snow-white fowers from early
late autumn. Pkt., 10c.; $1 / 4$ oz., 20c.; oz., 50 c .

Compactum Lilac. (Lilac Queen.) A distinct variety, very compact growth, only 4 inches high. Very pretty flowers of a pure lilac color. Pkt., 10c.; 1/4 oz., 25c.

Saxatile Compactum. (Basket of Gold.) A hardy perennial variety for beds or edging. The flowers are produced in large clusters and are of a most brilliant golden-yellow. Height, 9 inches. Pkt., 10c.; $1 / 4 \mathrm{oz}$., 50c.

## AMPELOPSIS (Boston Ivy)

A well known hardy perennial climbing plant with green leaves which turn beautiful shades of red in the autumn.
Culture. Plant early in hotbed and transplant when well established to place where they are to stand permanently. Seed may be sown outdoors after all danger of frost is past.

Veitchi. The most popular climber for covering brick or stone buildings or walls. Pkt., 10c.; $1 / 2$ oz., 25c.

## ANTIRRHINUM (Snap Dragon)

One of the most showy and useful border plants. We offer two kinds of snap dragons. The tall growing and the half dwarf, the plants of which vary in size but have equally large blooms. Snap Dragons have large brilliantly colored spikes with exceptionally sweet fragrance. They succeed in any good garden soil, and are very effective in beds. Very desirable for cutting. Blooming from June until late autumn.

Culture. Seed may be started under glass for early flowering. Sow outdoors in May, $1 / 8 \mathrm{inch}$ deep, thinning out the seedlings in good rich soil 1 foot apart.

## HALF DWARF VARIETIES



These semi-dwarf varieties produce as large flowers as the tall sorts, while the plants are of compact, bushy growth. Height, about 18 inches.

Cottage Maid. In this variety we have an attractive rich pink lightened up by a bright yellow lip. The flowers are large and closely set on the stem. Pkt., 10c.; $1 / 8$ oz., 20c.

Defiance. This has, for many years, been considered one of the brightest among the Snapdragons. The flowers are large, well formed, of a glowing vermilion with an orange cast. A magnificent variety. Pkt., 10 c . ${ }^{1 / 8} \mathrm{oz}$., 20 c .

Firebrand. Many consider this a real rival to Defiance as far as brilo liancy of color is concerned. The flowers are large and of a rich deep scarlet shade. The long spikes are always fully set. Pkt., 10c.; 1/8 oz., 20c.

Golden Queen. A standard variety which has proven its worth for many years. Of excellent habit, with fine lemon-yellow flowers tipped with rich golden yellow on the tip. The best yellow Snapdragon. Pkt., 10c.; $1 / 8$ oz., 20 c .

Nelrose. Rich silvery pink; a favorite shade with many gardeners. Of excellent habit and large size. Extensively grown for the flower market. Pkt., 10c.; 1/8 oz., 20c.

Queen of the North. The white flowers are of good size. They are borne freely on good size stems and bloom profusely for a long time. Pkt., 10c.; 1/8 oz., 20c.

Fancy Mixed. A complete mixture of all the above and many other fine half-dwarf varieties. Pkt., 10c.; 1/4 oz., 40c.

## TALL VARIETIES

The tall varieties grow 3 to 4 feet high, and are used extensively for cut flowers. The flower-stems are long and closely set with large flowers. They keep well as cut-flowers, lasting a long time in water.
Queen Victoria. Pure white..................... Pkt., 10c.
Ruby. Rich ruby-red.
Venus. Beautiful pale pink with white throat
" "
" 4

Yellow. Beautiful golden-yellow................. . Pkt., 10c. Giant Mixed. A complete mixture of all the finest tall varieties, including the above four varieties. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 25 \mathrm{c}$.

## AQUILEGIA (Columbine)

A beautiful hardy perennial, easily grown from seed. A most desirable border plant forming large clumps. Blooms early, long and abundantly. Very desirable for vases and table decorations.

Culture. Sow in boxes, $1 / 8$-inch deep in fine soil from spring to late summer, transplanting the seedling into rich deep soil 1 foot apart.

Glandulosa. One of the handsomest perennials, blossoms 3 inches in diameter of the deepest blue with white corolla. Pkt., 15c.; 1/8 oz., 45c.

Chrysantha. (Golden spurred yellow.) Beautiful goldenyellow color. Pkt., $15 \mathrm{c} . ; 1 / 8 \mathrm{oz} ., 45 \mathrm{c}$.

Jaetschani. Beautiful long red spurs with light yellow corolla. Very large blossoms. Pkt., 25 c .; $1 / 8 \mathrm{oz}$., 50 c .

Double Flowering Mixed. Beautiful long spurred large double flowers formed of several rows of cornucopia like petals and in various shades of yellow, blue, lavender and white. Pkt., 15c.; 1/4 oz., 30c.

## ASPARAGUS

This makes a most attractive and graceful pot plant. Very desirable for cutting for greenery to mix with flowers.

Culture. Sow in light soil covering $1 / 2$-inch, keeping regularly moist and transplant to small pots soon as large enough to handle. Repot as required using a very rich compost to encourage the formation of perfect fronds.

Plumosus. An excellent greenhouse climber with fern-like foliage. Pkt., 25c.; per 100 seeds, 60c.

## AMARANTHUS

A hardy annual of easy culture. Very ornamental either in the flower border or for center of beds. The foliage is exceedingly brilliant, while some of the varieties bear curious racemes of flowers. Height, 3 to 5 feet.

Culture. Of easy culture, doing best in warm sunny location, while the exquisite foliage colorings do better in rich loam soil. Sow in hotbed in April and plant out in May. Plants to stand 2 to 3 feet apart.

Caudatus. (Love Lies Bleeding.) Rapid growing garden annual with long drooping crimson racemes. Height, 3 feet. Pkt., 10c.

Tricolor. (Joseph's Coat.) Foliage curiously variegated with bronze, green and scarlet. Very striking as a border or for center of beds. Pkt., 10c.

## ARGEMONE

## (Mexican or Prickly Poppy)

Sturdy bushes about 3 feet high, with very ornamental pale green, spiny foliage, with clear silvery midrib and veins and poppy-like flowers of satiny texture, over 3 inches across, in various shades from rich yellow to creamy-white. It comes into bloom early in July and continues without interruption till November. It is best to sow the seed where they are intended to bloom as soon as the ground is warm, and should have a sunny location, and prefers light soil. A very pretty and ornamental plant in or out of bloom.

Hybrida Grandiflora. Mixed, Pkt., 10c.; 1/8 oz., 40c.

## ASTERS

The Aster, or more specifically the China Aster, in its many double varieties, is unsurpassed for bedding and cutting, and is not only one of the most profitable annuals for the professional florist but also one of the most satisfactory for the home garden. The great diversity of size, color, form and season of blooming makes it one of the most suitable plants for supplying cut flowers. The plants are usually of vigorous growth and so hardy that they endure a slight frost without serious injury. By planting the different strains and at different times, one may have in the latitude of Philadelphia a constant succession of bloom from the last of July till the middle of October without the aid of a greenhouse or even a hotbed.
Culture-Seed may be sown outdoors as early in spring as the ground is warm and dry, or for earlier blooming may be started indoors or in a cold-frame and transplanted in the open ground after danger of killing frost is over. If conditions are favorable they will usually do well in any well prepared garden soil but a strong loam that has been well fertilized the previous year is preferable. In planting cover the seed with about one-fourth inch of fine soil firmly pressed down. The rows for most of the varieties should be about one and one-half feet apart. When about one to two inches high, thin to sixteen inches apart in the row. It is desirable during warm and dry weather to water the plants thoroughly two or three times a week, preferably early in the morning or evening. It is desirable to change the location as often as practicable.

Insects, such as the red spider, may be kept at bay by frequently spraying with clear water, or for insects that eat the foliage add one-fourth teaspoonful of Paris Green to ten gallons of water. Sprinkle with tobacco water or dust to keep off the plant louse. We offer choice seed that has been grown for us from the best types by the most skilful cultivators in America and which is more certain to give good results than most of that on the market.


KING
Similar in habit to the late branching asters but producing a little earlier very large double blossoms of distinct form, many of the petals being rather narrow and slightly quilled and curved. The inner petals are incurved, covering well the center. The plants are large and vigorous with long strong stems.
Crimson King. The richest and deep-
est crimson variety known to us.... Pkt., 10c.; $1 / 4 \mathrm{oz} ., 60 \mathrm{c}$.
Pink King. An attractive delicate
shell pink.
Rose King. A beautiful brilliant rose variety.
Violet King. A pleasing soft shade
of violet..............................
Finest Mixed............ Pkt., 10c.; 1/4 oz., 50c.; oz., \$1.75


## QUEEN OF THE MARKET

Very desirable on account of extreme earliness as well as profuse blooming and wide range of colors. The plants are of somewhat compact but branching habit, rather open and spreading, about sixteen to eighteen inches high, bearing on long stems from ten to fifteen finely formed double flowers of medium size. The blooms, although rather flattened and not so large as those of the late sorts, are fine for cutting and this class is used extensively for growing under glass. This class is known also as Queen of the Earlies.

| Dark blue | Pkt., 10c.; 1/4 oz., 50c. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Crimson.. |  |  |  |  |
| Purple. | ، | " | " |  |
| White. | " | " | " | " |
| Rose | " | " | ، | " |
| Shell-Pink | " | ، | " | ' |
| Lavender | " | ، | " | ' |
| Lisht | ، | ، | ، | ، |

Finest Mixed............. Pkt., 10c.; 1/4 oz., 45c.; oz., \$1.50.

## HEART OF FRANCE

The best pure red Aster ever introduced. Heart of France opens red as the purest ruby, deepens with age, and retains its remarkable beauty to the very end. The flowers are large and full, with never a trace of hollow center. The plants are of branching type and very robust habit. They retain their brilliancy and lustre for a longer period than almost any other color. Pkt., 15c.; $1 / 4$ oz., $\$ 1.00$.

## AMERICAN LATE (Branching)

An exceedingly handsome Aster blooming in September. The flowers borne on long stiff stems are so very double as to appear almost like balls. The petals short and narrow are slightly folded and of durable, lasting substance. Very desirable for cut flowers. Height, 20 inches.
Shell Pink. (Mary Semple.) Soft and dainty.

Pkt., 10c.; 1/4 oz., 60c.
Rose. Deep rose. "
Azure Blue. Soft purple ............. . .
Crimson. Brilliant crimson . . . . . . . . .
White. Pure white . .
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Lavender. Soft lavender blue........ "
Finest Mixed...........Pkt., 10c.; 1/4 oz., 50c.; 1 oz., \$1.50.

## LAVENDER GEM

An early or mid-season variety with large, loosely arranged flowers of the Comet type, which are borne on long slender stems. When first open the flowers are a delicate lavender which gradually deepens as they mature. A beautiful color and a very desirable sort for cutting. Pkt.; 10c.; 1/4 oz., 85c.


GIANT COMET
(Ostrich Plume Asters)
Flowers of immense size composed of long wavy twisted petals, gracefu!ly formed into loose yet densely double half globes. Height, about 2 feet.


Finest Mixed............. . Pkt., 10c.; 1/4. oz., 40c.; oz., \$1.25.

## ASPERULA

Sweet scented pretty plants for borders or rock work. Succeeds finely in shady places. Continuously in bloom throughout the summer. Height, 10 inches.

Culture. Sow in boxes covering lightly with fine earth. Transplant late in spring to six inches apart.

Azurea Steosa. Light blue flowers very adaptable for bouquets. Pkt., 10c.
Baby's Breath. See Gypsophila, page 46.
Bachelor's Button. See Centaurea, page 41.

## BALSAM <br> (Lady's Slipper)

These favorite half hardy annuals are of the easiest culture but love hot sun, rich soil and plenty of water.

Culture. Seed may be started under glass during the end of winter or early spring, transplanting to the open ground when danger of frost is past. To grow fine specimens, plants should not be closer than 18 inches apart.

Camellia Flowered. Flowers of extra size, double and full centered with reflexed petals. Plants grow rapidly to about 2 feet and are extremely floriferous.

## Camellia Flowered

White Perfection. Large; double; white......... Pkt., 10c.
Scarlet King. Glowing, fiery scarlet; large double flowers.................................................
Salmon Queen. Deep rose-pink; large, double flowers.
Purple King. Double; rich purple ..............................
Finest Mixed.............................Pkt., 10c.; 1/4 oz., 25c.
Balsam Apple. See Momordica, page 49.
Balsam Pear. See Momordica, page 49.

## BALLOON VINE <br> (Love in a Puff)

A pretty and fast growing half hardy annual climber growing about 10 to 15 feet, bearing delicate clusters of dainty white blossoms, and numbers of large, round, inflated seed-buds resembling miniature balloons. The effect is most odd and curious. It is in every way a very attractive vine.

Culture-Sow seed outdoors early in the spring and train on a trellis, porch or fence.

Cardiospermum. Pkt., 10c.; oz., 25c.

## BEGONIAS

A valuable bedding plant producing small, many colored flowers in remarkable profusion throughout the entire summer until frost. As an indoor plant it has great popularity.

Culture. Sow seeds in shallow boxes in early spring. As the seed is small, extreme care must be taken in planting. In planting smooth the surface of the soil and press seeds in lightly. When large enough to handle, pot the plants which may be set outdoors as soon as the weather is warm enough.

## Semperflorens

Alba. White flowers in great profusion. Pkt., 15c.
Vernon. Rich red flowers, bronze foliage. Pkt., 10c.
Rosea. Rose colored, fine for borders. Pkt., 15c.
Finest Mixed. All colors from pure white to deepest crimson. Pkt., 10c.; $\frac{1}{16}$ oz., 25c.

## BELLIS PERENNIS <br> (English Daisy)

An old favorite and charming hardy plant useful for edging. If sown in early spring will flower in late summer and through fall; from sowings made later the plants will bloom the following spring. Give plants protection of leaves or straw, but not until ground freezes. When sowing cover seed very lightly and transplant 6 inches apart.
Snowball. Pure snowy white $\qquad$ .Pkt., 10c.
Longfellow. Delicate rose. $\qquad$ Pk., 10c

Double Mixed
.Pkt., 10c.; 1/8 oz., 30c.
Black-Eyed Susan. See Thunbergia, page 56.
Blanket Flower. See Gaillardia, page 45.
Blue Lace Flower. See Didiscus page 43.
Boston Ivy. See Ampelopsis, page 36.

## BRACHYCOME

## (Swan River Daisy)

A free-flowering, dwarf-growing annual; covered during the greater part of the summer with a profusion of pretty blue or white flowers. Suitable for edgings, small beds or pot culture.

Culture. Sow in fine soil in open border as soon as the weather permits. Cover the seeds very lightly, and thin out the seedlings to 6 inches apart. It mades a dainty pot plant for the window during spring.

Mixed. Blue and white. ...Pkt., 10c.; 1/4 oz., 25c.

## BROWALLIA

## (Amethyst)

Handsome annuals, covered with blue or white flowers during the summer and autumn months. An excellent plant for bedding or pot culture during winter. Height, 18 inches.

Culture. Sow $1 / 4$-inch deep in rich soil after the ground has become warm or seed may be started under glass during early spring. Set out plants 9 inches apart. The plant may be lifted in the fall, cut back and potted when they will bloom finely indoors during the winter.
Elata Mixed. Blue and white. .......Pkt., 10c.
Butterfly Flower. See Schizanthus, page 53.

## CALENDULA

## (Pot Marigold)

A splendid hardy annual of easy culture, growing in any good garden soil and producing a fine effect in beds or borders. Continues in bloom from early summer until killed by frost. Valuable for pot culture, blooming in the winter and early spring. Height, 1 foot.
Culture. Sow thinly in any good garden soil and thin out or transplant it 1 foot apart. For early blooming, start the seed indoors and set out in the border.

Lemon Queen. Large double flowered with brilliant light yellow blooms. Pkt., 10c.; oz., 30c.
Meteor. Large double yellow striped with orange. Pkt.,10c.; oz., 30c.

Orange King. Large double flower of intense golden-orange. Pkt., 10c.; oz., 30c.
Finest Mixed. All colors.........Pkt., 10c.; oz., 25c.
California Poppy. See Eschscholtzia, page 45.

## CALLIOPSIS

Very showy and free flowering annuals, blooming throughout the summer and fall, if not allowed to go to seed. The flowers are very dainty and pleasing, admirably adapted for table decorations and bouquets. Height, $11 / 2$ feet to 2 feet.

Culture. Sow $1 / 2$-inch deep in good garden soil during early spring and thin out to transplant to 6 inches apart. For early blooming the seed may be started indoors.
Drummondii. (Golden Wave.) Rich golden-yellow with small chestnut-brown center, very free bloom, height 12 inches. Pkt., 10c.; 1/4 oz., 20c.
Nigra Speciosa. A strong grower with good sized flowers of rich reddish-maroon. Height, 2 feet. Pkt., 10 c. ; $1 / 4 \mathrm{oz}$., 20 c .
Coronata. Large rich golden-yellow flowers. Height, 18 inches. Pkt., 10c.; $1 / 4 \mathrm{oz}$., 20c.

Finest Mixed. All colors........... Pkt., 10c.; oz., 35c.

## COREOPSIS

(Perennial Calliopsis)
Lanceolata Grandiflora. Fine hardy plants with large yellow flowers produced in the greatest abundance from June until frost. The beautiful large yellow flowers are borne on long stems and if cut young will last a week or more in water. Pkt., 10c.; 1/4 oz., 15c.

## CAMPANULA (Bellflower)

An old favorite hardy biennial plant worthy of a place in all gardens. The stately plants being literally smothered with its glorious large bell-shaped flowers in early summer.

Culture. Sow seed outdoors $1 / 8$-inch deep from early spring to mid-summer in rich well-drained beds, thin out in the fall or transplant 18 inches apart and cover with straw or leaves as a protection over winter. The plants do not flower until the second year.
Persicifolia Grandiflora. (Peach Bells.) One of the finest of the hardy bell flowers. Height, 2 to 3 ft . with large blue flowers. Pkt., 10c.

Persicifolia Alba. White flowered peach bells. Pkt., 10c.
Pyramidalis. (The Chimney Bellfower.) A beautiful stately plant for garden or pot culture. Blue flowers. Height, 5 feet. Pkt., 10c.

Pyramidalis Alba. White flowered. Pkt., 10c.
(Canterbury Bells)
Calycanthema. (Cup and Saucer.) Produce beautiful large and semi-double flowers resembling a cup and saucer. We offer three separate colors.

Cardinal Climber. See Ipomoea Quamoclit Hybrida, page 47.

## CANDYTUFT <br> (Iberis)

A beautiful hardy annual growing about 6 to 18 inches high, according to the variety. The blossoms are borne on variously long spikes and are quite large flowering and very fragrant. Of easy culture and very desirable edgings, bedding, rock gardens or for cutting.

Culture-Sow seed outdoors in April in rich ground, covering $1 / 4$ inch with fine soil, pressed down. When 2 inches high thin to 4 inches apart or plant seed indoors in Fall and transplant to open ground in Spring.

Lilac. A charming lilac shade adding color to the border. Pkt., 10c.; oz., 30c.

Dark Crimson-A large-flowered variety of clear crimson color. Few flowers make such a wonderful display. Pkt., 10c.; oz., 30c.

Rose Cardinal. Produces very large umbels of bright rosycardinal flowers, so the plant presents one unbroken sheet of bloom. Height, 8 inches. Pkt., 10c.; oz., 30c.

Umbellata, Mixed - The above and many others in a complete mixture. Pkt., 10c.; oz., 25c.


Giant White Hyacinth Flowered. A grand variety producing enormous spikes of bloom resembling a white hyacinth. The flowers often measure 7 inches long by $21 / 4$ inches in diameter. A complete mass of pure white flowers in a pyramid of bloom. Height, about 12 inches.
To produce the finest spikes the plants should be transplanted. Pkt., 10c.; oz., 50c.

## CARNATION (Dianthus Caryophyllus)

Carnations are general favorites for their delicious fragrance and richness of colors. Being hardy and free flowering, they are easily grown either in flower beds or in pots. One of the most valuable and beautiful of our summer flowers, also very desirable for greenhouse culture in winter.
Culture. The seed is sown indoors or under glass in February or March. Use a rich sandy soil and cover the seeds over lightly. Care must be taken to maintain an even temperature of about 60 degrees. As soon as danger of frost is past, transplant the seedlings outdoors in the permanent beds, setting them not closer than 18 inches apart each way.

## MARGUERITE CARNATIONS

An extra vigorous race, especially adapted for outdoor culture. They are very neat in habit and remarkable for their rich profusion of lowers produced six months from sowing. Satisfactorily grown as annuals from seed every Spring.
Fiery Scarlet
Pkt., 10c.
Bright Rose
"، 6
Pure White.
$1 / 4$ oz., 50 c .
Mixed. All colors Marguerite Carnations. Pkt., 10c.; $1 / 4$
Chabaud's Everblooming. A greatly improved strain originating from a famous French carnationist. Blooms in five months after being sown and continues to flower in the greatest profusion throughout the entire season.
Mixed. All colors mixed. Pkt., 10c.; $1 / 8$ oz., 30c.

## CANARY BIRD FLOWER (Tropaeolum Canariense)

Handsome foliage with an abundance of bright canary-yellow blossoms. A good climber, fine for rock gardens and hanging baskets, etc.; excellent window vine for winter. Half hardy annual. Height, 15 feet.

Culture. Sow seed outdoors early in Spring preferably in rich light soil by the side of a fence, arbor or trellis. Plants should stand about 8 inches apart. Bloom freely from early summer until killed by the frost. Pkt., 10c.; $1 / 2 \mathrm{oz} ., 15 \mathrm{c}$.
Castor Oil Beans. See Ricinus, page 53.
Catchfly. See Silene, page 54.

## CELOSIA (Cockscomb)

A rather curious and striking class of flowers with its brightly colored foliage and the dazzling reds of the blooms. It is frequently used as a tall border to relieve the sombre greens in clumps of shrubbery and trees. In solid beds it presents a mass of color.

Culture. A hardy annual. The seed may be sown outdoors, and later thinned. For early blooming start the plant indoors. They stand transplanting well.

## CELOSIA CHRISTATA (Crested Cockscomb)

Very desirable annuals, of easy culture. Producing large brilliant comb-like heads.

Glasgow Prize. Dark leaves and immense dark crimson combs. Pkt., 10c.; 1/4 oz., 50c.

## CELOSIA PLUMOSA

(Plumed or Ostrich Feather)
Beautiful annual foliage plants blooming in late summer and autumn. And producing large showy plumes, curled and curved, resembling ostrich feathers.

Crimson. The flower-heads are large and heavy. They are a rich crimson. A most impressive and strong color. Pkt., 10c.

Golden Yellow. The large flowers are an intense shade of rich yellow. Of enormous size and very showy in the border. Pkt., 10c.
White. Beautiful pure white flowered heads of pyramidal growth. Pkt., 15c.

Mixed. This fine mixture contains all the above beautiful colors. It is a well balanced and beautiful mixture. Pkt., 10c.; $1 / 4$ oz., 25c., oz., 75c.

## CELOSIA CHILDSII (Chinese Wool Flower)

This unique type of Celosia Plumosa forms-instead of pyramidal forms of bloom-large beautiful ball-shaped flower heads somewhat resembling balls of wool or chenille. The plants 2 to 3 feet in height, branch freely, each branch terminating with a flower head. It continues in flower from early summer until frost, and is very effective for garden, either massed or grown as individuals.

Crimson. This is a magnificent shade of crimson. A pure and strong color that brings life and warmth into the fall garden. Pkt., 10c.; $1 / 4 \mathbf{o z}$., 50c.

Yellow (New). This is a rich yellow shade with beautiful round and full flower heads. Pkt., 25c. ; 1/8 oz., 30c.

Pink (New). A delicate, yet rich shade of pink, a charming variety that blends well with the other varieties we are offering. Pkt., 15c.; $1 / 8$ oz., 40c.

White (New). The plants are simply covered with the handsome balls of pure white. A magnificent variety. Pkt., 15c.; $1 / 8 \mathrm{oz}$., 50 c .

## CENTAUREA

The popular Cornflower. Centaurea Cyanus is also known as Blue Bottle, Ragged Sailor and sometimes as Bachelor's Button. Bright flowered plants of the hardiest nature and simplest culture among the most attractive and graceful of all the oldfashioned flowers.

Culture-Seed may be started indoors and transplanted in the permanent bed when three inches high. May be sown in early fall for spring flowering.


## CENTAUREA CYANUS

 (Cornflower, Bachelor's Button)Delightful old-fashioned flowers, borne on long stiff stem about 1 to 2 feet high. A profuse bloomer, and excellent for cutting.
Double Blue. The favorite dark blue,
so much in demand for cutting...... Pkt., 10c.; $1 / 4 \mathrm{oz} .20 \mathrm{c}$.
Double White. Very fine, pure white... " " " " 20c.
Purple. Beautiful velvety purple..... " " " " " 15 c.
Rosea. Distinct shade, very fine....... " " " " 15 c .
Double-flowered Mixed. All colors mixed. Pkt., 10c.; $1 / 4$ oz., 20c.

## CENTAUREA—White Leaved <br> (Dusty Miller)

Extensively used for ribbon beds, edgings, vases, etc. The foliage is a beautiful silvery-gray.

Candidissima. Compact plants, silvery leaves, 1 foot. Pkt., 10c.

## CENTAUREA IMPERIALIS

## (Sweet Sultan)

A hardy annual of great beauty. The fluffy flowers borne on long stiff stems in their various colors are very beautiful. For bouquets and vases they are exceptionally beautiful. If cut when scarcely opened they will last for ten days in water. Plants are of easy culture, flowering freely in thegarden the first summer from seed sown in the early spring. Height, 2 to 3 feet.
Chameleon. Bright yellow flowers.... Pkt., 10c.; $1 / 4 \mathrm{oz}$. 25c. Purple. Rich dark purple............ " " " " "
Rosea. Brilliant rose-colored flowers... " " " " " " " " "
White. Satiny white flowers.......... " "
Choice Mixed. Pkt., 10c.; 1/4 oz., 25c.; oz., 75c.

## CHRYSANTHEMUM

These annuals should not be confounded with the winter flowering sorts grown by florists. They bloom profusely from early summer until frost, and, when grown in large beds or masses, their bright colors make a splendid show.

Culture-For early blooming sow the seeds in frames or window boxes, and afterwards transplant to the garden, or seed may be sown where plants are to flower after all danger of frost is past. Thin the seedlings, 8 to 10 inches apart. Pinching back in early growth makes the plants bushy and shapely. Height, 1 to $11 / 2$ feet.

Northern Star. Very large daisy-like flowers, 3 inches across with pure white fringed petals with canary-yellow zones around a dark brown eye. Pkt., 10c.

Morning Star. Petals canary-yellow with halo of deeper yellow, disc dark yellow. Pkt., 10c.

Burridgeanum. Pure white petals with zone of rich brownishred and inner zone of yellow surrounding the dark brown disc. Pkt., 10c.
Coronarium Double Sulphureum. Pale yellow. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Pkt., 10c.
Coronarium Double Yellow. Golden-yellow.
Very fine...................................... . .
Coronarium Double White. Pure white..... " "
Coronarium Double Mixed. Pkt., 10c.; oz., 40c.

## CHRYSANTHEMUM LEUCANTHEMUM (Shasta Daisy)

Alaska. A splendid hardy perennial variety with flowers rarely less than five inches across, of the purest glistening white, with broad overlapping petals and borne on long strong stems. A beautiful cut flower, remaining in good condition a week or more. Pkt., 20c.

## CINERARIA

One of the most useful and ornamental of greenhouse, with flowers of the richest and most brilliant colors and shades, and of the finest texture. It is rather a difficult plant to grow if its requirements are not understood. The mistake usually made in growing it is in a warm location instead of a cool one.

Culture-Seed may be sown from April to September. If desired for winter blooming sow early in April in shallow box in fine soil. Drop the seed in shallow drills, cover, and press the earth rather firmly with a piece of board. Set the box where it will get the morning sun, water moderately and carefully.

Dwarf Exhibition Hybrids. Pretty tiny plants, rarely exceeding eight inches in height. The flowers are small, but many in number and gay in colors, making large heads, particularly charming. Pkt., 35c.

Matador. A new large flower of a brilliant scarlet red. Pkt., 35c.

Stellata (Star Cineraria). A charming variety with large spreading panicles of star-like flowers in a wide range of colors. The extreme grace and elegance of the plant and flowers make them wonderfully effective for the decoration of the house and conservatory. Also useful for cutting. Pkt., 25c.

## CLARKIA

One of the prettiest and showiest of hardy annuals that bloom freely and have flowers of such various bright colors that a bed of them in full bloom is a beautiful sight. Useful for hanging baskets, vases, and as edgings to beds of larger growing plants. Height, $11 / 2$ feet.

Culture-Sow seed outdoors in early spring and grow in partial shade. The plants keep up a continuous bloom through midsummer to late autumn.

Elegans Alba. Very double. Pure white. Pkt., 10c.
Elegans Salmon Queen. Lovely salmon pink flowers. Very double. Pkt., 10c.

Elegans Double Mixed. A fine mixture including many sorts. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 25 \mathrm{c}$.

## CLEMATIS

## (Virgin's Bower)

One of the finest hardy perennial climbers. Of strong, rapid growth, with small dense cheerful green foliage, deliciously fragrant; white and purple flowers appearing in great profusion in August and September. The plants succeed in almost any position. Not only is it adapted to run up all kinds of supports, but is just as useful for rock work or sloping banks; in fact any position where a graceful vine or trailer is desired.

Culture-Start the plant indoors early in the spring. The seed germinates very slowly. When three or four inches high, transplant outdoors setting the plants about twelve inches apart. Although perennial, some protection through the winter is advised.

Assorted Hybrids. Collection of the best colors. Pkt., 10c.

## COB届A (Cathedral Bells)

A very handsome climber, attaining a height of from thirty to fifty feet in one season. The foliage is dark green and the blooms bell-shaped; green in color at first and afterwards changing to a beautiful violet shade. Valuable for covering trellises, arbors, trunks of trees, etc. Will cling to any rough surface.
Culture-In sowing, place seeds edgewise to promote germination. Seed may be sown indoors, and later transplanted, after all danger of frost is past, setting the plants not closer than twelve inches apart. Give protection with straw over winter.
Scandens. Large bell-shaped purple flowers. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 25 \mathrm{c}$.

Cockscomb. See Celosia, page 41.

## COIXLACHRYME <br> (Job's Tears)

A curious ornamental grass, having broad blades similar to corn which are valuable for winter bouquets. It bears large dark colored seeds which resemble a tear drop. Used for beads, teething babies, or an old-fashioned remedy for sore throat. Height, two to three feet.

Culture-Sow seed outdoors early in the spring. Three seeds to a hill; eighteen inches apart each way. Pkt., 10c.; oz., 15c.

Columbine. See Aquilegia, page 37.

## CONVOLVULUS (Morning Glory)

Beautiful annual climbers of easy culture, producing freely all summer long. Large funnel-formed flowers of lovely colors and combination of coloring.

Culture-Soak the seeds in warm water for several hours just before planting. Sow outdoors early in the spring, and when seedlings appear, thin out to six inches apart.
C. Major (Tall Growing Variety). Beautiful shades of assorted colors. Should be trained on strings, wires, trellis or fence. Height, fifteen feet. Pkt., 10c.; oz., 20c.
C. Minor (Dwarf Variety). The dwarf varieties are well adapted for beds or rock work, growing no higher than twelve inches. They bloom profusely throughout the summer and in spite of the name, Morning Glory, the flowers stay open all day. Beautiful assorted colors. Pkt., 10c.; oz., 20c.

## Ipomoea Imperialis (Japanese Tall Variety) see page 47.

## Coreopsis. See Calliopsis, page 40.

Cornflower. See Centaurea Cyanus, page 41.

## COSMOS

One of the most notable fall flowers. A strong tall growing annual with bold flowers of exquisite daintiness and airiness. Heightened in effect by their foliage setting of feathery green. It is most effective when planted in broad masses or long background borders against evergreens or fences.

Culture-Sow seed outdoors early in spring in rather light soil, which should not be too rich as this induces excessive plant growth at the expense of the blossoms. A sunny location is preferable. Cover the seed with about one-fourth inch of soil firmly pressed down. If planted in rows, make the rows about two feet apart and when the young plants are well up, thin out from four to six inches apart in the row.


## EARLY-FLOWERING

This new strain is very early, coming into bloom two weeks before others. The flowers are of enormous size and well rounded. Height, 5 to 6 feet.

CRIMSON. Of enormous size. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 20 \mathrm{c}$. PINK. A soft and delicate shade. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 20 \mathrm{c}$. WHITE. Most remarkable. Pkt., 10c.; $1 / 4$ oz., 20c.
MIXED. The three colors mixed. Pkt., 10c., $1 / 4 \mathrm{oz} ., 20 \mathrm{c}$.

## LATE FLOWERING

The flowers are of enormous size and begin to bloom ten days to two weeks later than the early-flowering type. Height, 5 to 6 feet.

GIANT CRIMSON. Fine crimson of marvelous size. Blooms profusely all during the fall until killed by frost. Pkt., 10 c . ; $1 / 2$ oz., 25 c .
LADY LENOX. Lovely shell-pink flowers which measure $31 / 2$ to $41 / 2$ inches across. Very free blooming. Pkt., 10c.; $1 / 20$ oz., 25c.

WHITE LADY LENOX. A clear waxy white form of the above. Always carried on long stems. A very free bloomer of strong and tall habit. Height, 5 to 6 feet. Pkt., 10c.; $1 / 2$ oz. 25c.

GIANT MIXED. All giant-flowered varieties in complete mixture. Pkt., 10c.; $1 / 2 \mathrm{oz} ., 25 \mathrm{c}$.; oz., 40 c .
YELLOW-COSMOS "KLONDYKE." Golden yellow flowers borne on long stems, and measures from $21 / 2$ to $31 / 2$ inches across. To get this variety in bloom before frost in the States north of Virginia it should be grown in pots or boxes, so that the roots are confined, thus throwing it into flower. Pkt., 10c.

## DOUBLE CRESTED COSMOS

This new type of cosmos is unique and exceedingly pretty. The flowers are of good size with fully double centers, and an outer row or crest of broad petals. The plants are vigorous, attaining a height of five feet and are covered with blooms from August until killed by frost.

White Queen. Pure white, large size. ............ Pkt., 15c.
Pink Beauty. Lovely pale pink flowers. ......... " "
Crimson King. A fine rich crimson. ........... " "
Mixed. Above colors mixed. .......Pkt., 10c.; 1/8 oz., 35c.

## CYCLAMEN

These bulbous greenhouse plants are all very beautiful and are unapproached among winter flowering plants for duration of bloom, variety of shades and wealth of coloring. They are among the best plants recommended for house culture as they thrive well and bloom profusely in the average temperature of the living room.

Culture-Sow the seed in small boxes or seed pans in a compost of well rotted manure, leaf mold and sand in the early winter months. Cover lightly with moss, which should be kept moist, and should be removed after the seed germinates. Prick out into small pots when the young plants have two leaves. If grown steadily without any check they will flower in from ten to twelve months. Height, nine inches.

PERSICUM GIGANTEUM
Album Mont Blanc. Pure white. ...............Pkt., 35c.
Salmoneum. Bright salmon color. .............. " "
Crimson King. Dark blood-red. ............... " "
Roseum. Bright rose. ............................... " "
Persicum Mixed. .................................... " 25 c.
Cypress Vine. See Ipomoea Quamoclit, page 47.

## DAHLIA

These well known flowers are commonly grown from the tubers, but may also be grown from seed. They are of easy culture and will grow in most any kind of soil.

Culture-Plant the seeds in shallow boxes indoors in the early spring, and transplant outdoors when all danger of frost is past. They will bloom nicely the first year.

Giant Flowered Choice Mixed. Magnificent long stemmed single and double flowers of immense size in great variety of color. Pkt., 10c.
Dahlia Roots. (See Pages 59, 60, 61, 62 and 63.)

## Daisy-English. See Bellis Perennis, page 39.

Daisy-Shasta. See Chrysanthemum Leucanthemum, page 42.
Daisy-Swan River. See Brachycome, page 39.

## DIDISCUS CÆRULEA

## (Blue Lace Flower)

This beautiful annual, which was quite well known in the gardens of our grandparents, has come again to the foreground. It is hard to believe that such a pretty and easily grown flower should have been almost forgotten for such a long time. Blue Lace Flower grows into an upright, very much branched plant of about 2 feet in height. Each branch ends in an umbel of light sky-blue flowers which spread out in an umbrella-like fashion, crowning each shoot with a beautiful and delicate head of flowers. Each individual bloom in the umbel is carried on a thin and long tube, giving the flower-heads a delicate and dainty touch. The blooms resemble in their quaint and artistic arrangement the most delicate and dainty lace. Blue Lace Flower is a foremost cut-flower which lasts unusually long in water. It is very easily grown. The seed may be started indoors in March. The plants will be ready for setting out early in May. Or the seed may be sown right out of doors in a well-prepared seed-bed early in May. For best results the ground should be well drained but at the same time plenty of moisture should be provided during the warm summer weather. We are sure that many of our customers will be anxious to include this fine annual in their garden. Pkt., 15c.

## DATURA

## (Angel's Trumpet)

Large branching plants, producing very large, handsome, trumpet-shaped blossoms of exquisite fragrance. Excellent for late summer and autumn flowering.

Culture - Seed may be sown outdoors after danger of frost is over, but for early blooming, sow in hotbeds and transplant about three feet apart each way. Roots may be kept all winter in cellar. Tender annual. Height, three feet.

Cornucopia (Fastuosa). "Horn of Plenty." The most handsome variety of Datura. Immense double flowers, each blossom shading from white in the center to deep purple on the fringes. Pkt., 10c.

## DELPHINIUM

## (Larkspur)

In variety and beauty of its blue tints which are as numerous as they are charming, no other plant can equal the Delphinium. The brilliant flowers are strongly effective in beds or masses in borders, shrubberies or in combination with white lilies. Improvements are continually being made in the size of the flowers, as well as in the length and fullness of the spikes. Some of the species flower both early and late. The season for all can be prolonged by cutting away the withered flower stems.

## ANNUAL VARIETIES

These include the Rocket or Hyacinth flowered, so called from their long narrow flower spikes. They bloom best in a rather cool, moist soil.

Culture-Sow seed in the open border, either in spring or fall, preferably the latter, so that germination may take place very early in the spring. As the seedlings grow, thin to stand six to eighteen inches apart according to variety. The varieties are seldom kept separate as they are quite as pretty and convenient for cutting when sown in mixture.

Giant Hyacinth Flowered. Finest mixed. Pkt., 10c.; oz., 40c.

Tall Double Branching (Stock Flowered). The finest class of Larkspur for cutting and borders, with long spikes of large double flowers. Two feet high. Finest mixed. Pkt., 10c.; oz., 40 c .

## PERENNIAL VARIETIES

These are usually taller than the annuals requiring more space between the plants. If sown in the fall or very early spring, nearly all will bloom the first season. Foliage, clean and pretty; habit, strong and neat; flower spikes long and dazzling.

Chinense Album. Large pure white flowers extra fine. Pkt., 10 c .

Chinense Azureum. Beautiful distinct shade of blue. Very attractive in the border. Pkt., 10c.

Cardinal. Brilliant scarlet. Pkt., 15c.
Belladonna. Turquoise blue. Pkt., 15c.
Hybridum f1. pl. Double Mixed. All sorts in brilliant mixture. Pkt., 10c.; $1 / 2$ oz., 25c.

## DIGITALIS

## (Foxglove)

Handsome and highly ornamental hardy plants of stately growth, succeeding under almost all conditions, and with but little attention will give a wealth of flowers during June and July. They are now used extensively with good effect for naturalizing in shrubberies, the edge of woods and other half-shady places; three to five feet.

Culture-Sow the seed in late May and transplant when large enough, eight to ten inches apart. No flowers appear the first year. Protect with litter over winter. Seed may also be sown in fall.

Gloxiniaeflora. Large, spotted, gloxinia-like flowers, produced on long spikes. Three and one-half to five feet.

All Colors Mixed. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 30 \mathrm{c}$.

## DIANTHUS

Dianthus Chinensis (Pinks). The Pinks are old-fashioned favorites and as a class are more varied in color than the Carnations but lack their fragrance. Both the single and double Pinks are well adapted for bedding and borders, and are suitable also for cutting as the stems are of good length and the brilliantly colored flowers, often $11 / 2$ to 2 inches across, contrast vividly with the rather narrow bright light green leaves.
Seed may be sown in the open ground in spring after danger of frost is past, in the place where the plants are wanted to bloom. Use well pulverized soil, preferably sandy loam. Make the rows one foot to fifteen inches apart and cover the seed with one-fourth inch of fine soil firmly pressed down. When two inches high, thin six to eight inches apart. Plants compact, bushy, usually about one foot high. When grown for spring blooming, if in a well drained situation and protected by a light mulch of straw or leaves, the plants are less likely to winterkill than if in a moist unprotected part of the garden during the colder months. The plants thus wintered over will produce more and better blooms than those of the first season.

## DOUBLE ANNUAL PINKS

China or Indian Pinks (Dianthus Chinensis). Flowering from early summer to fall; strong, sturdy growers, suitable for beds and borders. Flowers very double and in unlimited variety of colors, borne on long, stiff stems.

Finest Mixed. Pkt., 10c.; 1/4 oz., 25c.
Japanese Pinks (D. Heddewigii and varieties). A beautiful class of sturdy-growing plants, ten to twelve inches high and of the same width; handsomely marbled and mottled flowers in all imaginable colors, two inches and over in diameter.

Finest Mixed. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 25 \mathrm{c}$.

## HARDY GARDEN PINKS

Very desirable for beds, borders, cemetery planting, etc. The flowers are highly prized for their spicy, refreshing odor.

Single Early-Flowering Grass Pinks (D. plumarius). Pheasant's Eye. Many-colored, fragrant flowers, nicely fringed.

Finest Mixed, Pkt., 10c.; $1 / 4$ oz., 30c.

## Dianthus Caryophyllus. See Carnation, page 40.

Dianthus Barbatus. See Sweet William, page 54.

## DIMORPHOTHECA

## (African Golden Daisy)

A rare and showy annual, having dark orange flowers two and one-half inches in diameter with a dark brown-disk in the center. The flowers are glossy and present a striking appearance in the sun. Excellent for summer flowering borders, especially along the roadside.
Culture-Sow seed early in the spring in rows twelve to eighteen inches apart. When three inches high, thin the plants one foot apart in the row. A sunny situation is preferable. Bloom throughout the summer.
Aurantiaca Hybrid. A fine mixture of all shades. Pkt., 10c.

## DOLICHOS

(Hyacinth Bean)
A fragrant, rapidly growing annual climber bearing large handsome foliage and bright flowers followed by curiously lima bean shaped pods. Very desirable for covering trellis and arbor. Height, 8 to 10 feet.

Culture-As the seed coat is very hard it should be sown an inch deep in the late fall or winter where intended to grow. If sowing in the spring cut a small piece off the skin or seed coat, and soak in warm water for 12 hours before sowing.

Darkness. Stems and under sides of foliage purplish-red. The numerous spikes of reddish-purple, pea like flowers are succeeded by showy seed pods. Pkt., 10c.; oz., 25c.
Dusty Miller. See Centaurea, page 41.
Elephant's Ear. See Caladium Bulbs, page 65.
Everlasting Flowar. See Acroclinium, Gomphrena, Rhodanthe, Helichrysum and Xeranthemum.

## ECHINOCYSTIS (Wild Cucumber Vine)

The fastest growing annual vine in existence; will grow 20 feet in six weeks. Pretty foliage and inconspicuous white flowers.
Culture-Soak the seed over night in warm water and sow one inch deep after all danger from frost is past and the ground has become warm.
Labata. Pkt., 10c.; oz., 35c.

## ESCHSCHOLTZIA (California Poppy)

Eschscholtzias are among our most beautiful and popular annuals, being of easiest culture. From spring sown seeds they flower profusely until killed by frost. Excellent for beds, edging or masses. The plants are about of dwarf branching habit, about one foot high.

Culture-Sow the seeds early in May in permanent rows, 12 inches apart, later thinning to 8 inches in the row. The seedlings are difficult to transplant.


Crimson King. The best of the red-flowering varieties. Bright crimson, interior satiny carmine. Pkt., 10c.; $1 / 40 z ., 20 c$.
California Aurantiaca. Rich golden orange. Pkt., 10c.; oz., 30c.
Caniculata Rosea. Soft flesh-pink, petals fluted or crimped. Pkt., 10c.; oz., 40c.
Golden West. Bright buttery yellow with orange center. Pkt., 10c.; oz., 40c.
Mandarin. Inner side of the petals rich orange, outside brilliant scarlet. Pkt., 10c.; oz., 40c.
Vesuvius. Rich wallflower or coppery-red. Pkt., 10c.; $1 / 4$ oz., 25c.
Mixed. All colors. Pkt., 10c.; oz., 30c.

## EUPHORBIA

Strong growing annuals for beds of tall growing plants or mixed borders; the flowers are inconspicuous; its foliage, however, is exceedingly ornamental.

Culture-Sow the seed outdoors early in the spring and thin out late to 18 inches apart.

Variegata (Snow on the Mountain). Elegant bushy plants with broad green leaves, veined and margined with white. Height, 2 feet. Pkt.. 10c.; $1 / 2$ oz., 25c.

Forget-Me-Not. See Myosotis, page 49.
Foxglove. See Digitalis, page 44
Four o'Clock. See Mirabilis, page 49.

## Flax. See Linum, page 47.

## GAILLARDIA (Blanket Flower)

Splendid showy annuals, remarkable for the size, profusion and brilliancy of their flowers, which continue in bloom from early summer until November. Excellent for beds, borders or for cutting.
Culture. Seed may be started indoors early in spring and transplanted outdoors in May. Usually sown where they are to bloom. Height, $11 / 2$ feet.
Picta Mixed. Single sorts, fine colors. Pkt., 10c. $1 / 4$ oz., 20c. Lorenziana Mixed. A charming, profuse double-flowering strain. Invaluable for bouquets. Beautiful mixed colors. Pkt., 10c.; $1 / 4$ oz., 15c.

## HARDY PERENNIAL VARIETIES

Grandiflora Mixed. Splendid combinations of reddish-brown and gold in great variety. Pkt., 10c.; $1 / 2$ oz., 25c.

## GODETIA

Very neat and free flowering annuals that are highly prized for edging and for solid beds, for a blaze of color they will vie with the nasturtiums. Should not be planted in too rich soil. In bloom from June until October.

Culture-The plants may be started indoors but the seed is usually sown outdoors and the plants thinned 8 to 12 inches apart.

Crimson Glow. A splendid, free-flowering, compact variety, blood-crimson. Height, 9 inches. Pkt., 10c.; $1 / 4$ oz., 35c.

Duchess of Albany. Compact large satiny white flowers in pyramidal clusters. Height, 9 inches. Pkt., 10c.; $1 / 4 \mathbf{~ o z . , ~ 3 0 c . ~}$ Dwarf Mixed. Many brilliant colors. Pkt., 10c.; $1 / 4 \mathrm{oz}$., 15c.

## GOURDS-ORNAMENTAL

These are desirable in many places where an immense amount of vine is wanted quickly. Most sorts are good for 20 to 30 feet in a season and the blooms of some are quite striking and handsome. With many sorts the fruit is unique and ornamental and often useful.

Culture-Sow seeds outdoors after all danger of frost is past.
African Pipe or Calabash. Odd shaped fruit. The stem ends of which are used in making pipes. Pkt., 10c.; oz., 30c.
White Nest Egg. Fruit looks exactly like a hen's egg and may be used as nest eggs. Pkt., 10c.; oz., 25c.
Pear Shaped. Striped, yellow and green; very showy. Pkt., 10c.; oz., 35c.
Hercules Club. Fruit grows 3 to 4 feet long and shaped like a club. Pkt., 10c.; oz., 30c.

Dipper. When dried may be used for dipper. 9 to 12 inches long, holding from 1 to 4 pints. Will last for years. Pkt., 10c.; oz., 25c.

Dish-Rag or Bonnet Gourd. Many women prefer a dish cloth made of this gourd to anything else, as it is always sweet and clean as long as any part of it is left. Pkt., 10c.; oz., 25c.

Spoon. Small ball-shaped fruit with slender necks, deep orange. By slicing off a part of the side of the bowl a satisfactory spoon may be made. Pkt., 10c.; oz., 30c.

Mixed Varieties. All kinds. Pkt., 10c.; oz., 25c.

## GOMPHRENA

## (Globe Amaranth)

Also called "Bachelor's Buttons." A showy annual everlasting flower, resemble clover heads and when dried are useful for winter bouquets; fine for bedding. Half hardy annual. Height, 18 inches.

Culture-Start the plants indoors in March. As the seeds germinate very slowly, soak several hours in water before sowing. Set plants outdoors in spring after all danger of frost is over, distance 10 to 12 inches apart.

Mixed. All colors. Pkt., 10c.; 1/2 oz., 25c.

## GYPSOPHILA

## (Baby's Breath)

Beautiful star-shaped white flowering, very fragrant and borne in profusion on long feathery stems. Used largely for mixing with other cut flowers. A hardy perennial, blooming throughout the summer into the late fall.

Culture-Sow seed early in spring in prepared light rich soil, and thin late to 12 inches apart. A light covering of mulch is desirable for protection during the winter.

Elegans Alba Grandiflora. This is an improved large flowering, pure white form of the Baby's Breath of free and easy growth. Several sowings should be made during the season to keep up a supply. Pkt., 10c.; $1 / 4$ oz., 20c.

Paniculata. White flowers, fine for bouquets; one of the favorite hardy perennials; blooms first year if sown early; 2 feet. Pkt., 10c.; 1/4 oz., 25c.

## HELIANTHUS

## (Sunflower)

These comprise plants of majestic growth and immense showy flowers suitable for shrubberies, woodlands, wild gardens, subtropical gardening. The dwarfer sorts with smaller flowers are charming when grouped in mixed flower borders. Excellent for cutting.

Culture-Seed should be sown in permanent beds early in the spring and requires little care.

## SINGLE ANNUAL VARIETIES

Cucumerifolius. Small single rich yellow flowers, black disk. Height, 4 feet. Pkt., 10c.; $1 / 4$ oz., 20c.

Stella (Miniature Sunflower). Differs from the above type by its larger and better formed flowers of the purest golden yellow with small dark disk. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 20 \mathrm{c}$.

Orion. Artistic and effective new variety of "Stella." The pointed petals are finely twisted and curled resembling a cactus dahlia. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 20 \mathrm{c}$.

Russian Mammoth. Gigantic single yellow flowers. Height 6 feet. Pkt., 10c.

Red and Gold. Strong sturdy plants branching to a height of 7 to 9 feet, producing several large flowers of refined form. The coloring varies from golden yellow splashed with red to nearly all red, but the great majority are Gaillardia coloredthat is the wide zone of red surrounds the purplish-black center. The ends or tips of the petals being a rich golden yellow color. A combination that is very rich and effective. Pkt., 10c.; $1 / 4$ oz., 35c.

## DOUBLE ANNUAL VARIETIES

Cucumerifolius F1. P1. The double flowering form of the popular miniature sunflower. The flowers while double are quite free and graceful of a bright golden yellow. Pkt., 10c.; $1 / 2 \mathrm{oz}$., 20c.

Chrysanthemum Flowered. Magnificent flowers of rich orange color, 6 to 8 inches in diameter, densely double, the petals being long and fringed, resembling a chrysanthemum or dahlia. The plants, 6 to 7 feet high, carry many of these noble flowers. Pkt., 10c.; 1/2 oz., 20c.

## HELIOTROPE (Cherry Pie)

A half hardy perennial, flowering during the whole season; its delightful fragrance makes it a most desirable bouquet flower. A splendid bedding plant, or may be trained as a greenhouse climber.

Culture-Sow seed indoors in March or April and transplant outdoors when all danger of frost is past. Will not survive the winter. For potted plants sow seed in the fall.

Mammoth Mixed. A selected assortment of colors including purples, blues, and lilacs. Pkt., 10c.; $1 / 8 \mathrm{oz} ., 40 \mathrm{c}$.
Hyacinth Bean. See Dolichos, page 44.

## HELICHRYSUM <br> (Straw Flower)

A hardy annual and one of the best everlastings. The plant is $21 / 2$ feet high and produces large double daisy-like flowers with prominent centers and stiff overlapping scales, which make a fine display in the garden during the summer. When dried the flowers retain their shape and color for years, and placed in vases or baskets without water, make splendid winter bouquets and decorations.
Culture-Plants succeed in any good garden soil if given plenty of space. Place at least 12 inches apart. Seed may be sown outdoors early in spring and later thinned.

## MONSTROSUM FL. PL.

| Fireball. Bright red. |  |
| :---: | :---: |
| Silver Ball. Glistening white. |  |
| Golden Ball. Golden yellow. | ، ، |
| Rose Queen. Rich carmine rose | " " |
| Salmon Queen. | " " |
| Violet Queen. | ، 6 |
| Mixed. All colors | oz., 20c |

## HOLLYHOCK

One of the most majestic of hardy plants and a clump or line in any garden gives an effect not attainable with any other plant. For planting among shrub-
 bery or forming a background for other flowers, it is without equal.

Culture-Sow the seed indoors or in beds early in the year, and transplant to open ground when the plants have made five leaves, setting the plants two feet apart. Seed may also be sown any time before midsummer and will produce fine plants for flowering next year.

## DOUBLE VARIETIES

Pkt., $1 / 4 \mathrm{Oz}$.

| White....... 10c. | 40c. |  |
| :--- | :--- | :--- |
| Pink....... | " | " |
| Crimson..... | " | " |
| Yellow..... | " | " |

Choice Double Mixed. Splendid assortment of double varieties. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 30 \mathrm{c} . ; \mathrm{oz}$. , $\$ 1.00$.
"ALLEGHENY." Mammoth flowers, wonderfully formed of loosely arranged fringed petals which look as if made from the finest China silk. The colors vary from the palest shrimp-pink to deep red. The plants are of strong growth, sending up spikes 6 to 7 feet high. Pkt., 10c.; 1/4 oz., 30c.

## HUMULUS <br> (Japanese Hop)

A rapid climber which in a few weeks' time attains a height of 20 to 30 feet. Resembles in shape the common hop, but being an annual attains full perfection the first season. Color a lively green. One of the best climbing plants for trellises. Heat, drought and insects do not trouble it.
Culture-Seeds should be planted in the open ground after all danger of frost is over, or if started indoors, young plants can be transplanted to the open as soon as warm weather appears. A rich garden soil, deeply dug and liberally enriched with manure is best.
Variegatus. A beautiful variety the leaves of which are blotched and striped with silvery white, light and dark green, which retain their brightness until killed by frost. Pkt., 10c.; $1 / 4 \mathrm{oz}$., 25c.

## IPOMOÆA

Beautiful climbing plants of rapid growth with varied flower. Suitable for covering walls, trellises and arbors.

Culture - The seed may be sown in a permanent bed early in the spring. It is well to soak the seed in warm water over night to assist in rapid germination.

Cypress Vine (I. Quamoclit). A tender annual with very delicate fern-like leaves and masses of beautiful small red or white star-shaped flowers.

Scarlet. Pkt., 10c.; oz., 40c.
White. Pkt., 10c.; oz., 40c.
Mixed. White and Scarlet. Pkt., 10c.; oz., 30c.
Cardinal Climber (Quamoclit Hybrida). A new and absolutely distinct annual climber, conceded to be the most beautiful and brilliant annual climber introduced. It is a strong and rapid grower attaining a height of 30 feet or more with beautiful fern-like foliage and literally covered with a blaze of circular cardinal-red flowers about $11 / 4$ inches in diameter. Like other Ipomoeas, it delights in a warm sunny location and good soil. The seed may be started indoors early in the spring but it is just as well to wait until the weather gets warm and settled and then sown outdoors. Pkt., 15c.

Moon Flower (Mexican Grandiflora Alba). At night and during cloudy days the plants are covered with an abundance of large pure wax-like white flowers, 5 to 6 inches in diameter. A very rapid grower, covers a vast area, 30 feet high and 6 feet wide. Pkt., 10c.; $1 / 2$ oz. 30c.
Japanese Morning Glory (I. Imperialis). The flowers of this charming variety are of gigantic size, often measuring 3 to 4 inches across. The colors of the flowers, shadings and markings are unlimited. Some flowers are of deep rich velvety colors, others daintily tinted and shaded. There are reds from soft rose to crimson and garnet, daintiest blue to purple, snow white to silver gray. Some flowers are striped blotched and spotted, others have magnificent edges and throats. The foliage is luxuriant, attaining a height of from 30 to 40 feet. The leaves are slightly mottled light and dark green, white and gray.

Japanese Mixed. Pkt., 10c.; oz., 25c.
Iberis. See Candytuft, page 40.
Ice Plant. See Mesembryanthemum, page 48.
Japanese Hop. See Humulus, page 46.
Job's Tears. See Coix Lacrymæ, page 42.
Joseph's Coat. See Amaranthus, page 37.

## KOCHIA

## (Mexican Fire Bush or Summer Cypress)

A very attractive and popular foliage or hedge plant. It grows about 3 feet high with many slender branches pressed close to the main stem and resembles a small closely sheared evergreen; the slender foliage being a delicate light green. They are very attractive and in the fall they turn to carmine and blood red, at the same time the ends of the shoots are thickly set with small bright scarlet flowers, thereby earning the name of Firebush.

Culture-Sow seed outdoors in good rich soil after all danger of frost has passed, covering the seed to a depth of about three times its size. Press soil down firmly and when plants are well established thin out or transplant to prevent crowding. Hardy annual.

Childsii Improved. This new variety grows more vigorously than Tricophylla. It remains light green until late in the fall, and then turns to a most beautiful deep crimson-purple. The plants hold their color until Christmas and even later. Pkt., 10c.; oz., 25c.

## KUDZU VINE <br> (Pueraria Thunbergiana)

A rapid growing climbing vine with purple wistaria-like fragrant flowers, large leaves. Perhaps the strongest growing and most vigorous of all climbers. Will climb 25 to 30 feet in one season. It freezes down every winter and comes up from the roots each succeeding season. A fine vine for arbors, verandas, etc.

Culture - Sow when danger of frost is past in fine porous soil, $1 / 4$-inch deep and keep moist until the seed germinates. Transplant 6 to 12 feet apart on trellis. Pkt., 10c.
Lady Slipper. See Balsam, page 39.

## LANTANA

A beautiful and most desirable greenhouse plant, also suitable for summer bedding. The plants are constantly in bloom, the flower heads somewhat resembling verbenas. The colors range from orange, white to rose and red. Height, 2 to 3 feet.

Culture-Sow under glass early in spring, using very fine soil and transplant when large enough to handle, three inches apart or pot singly. Plant 2 feet apart in rich deep ground when all danger of frost is past.

Dwarf Bedding Hybrids. Mixed. Height, 1 ft . Pkt., 10c.; $1 / 4 \mathrm{oz}$., 25c.

## Larkspur. See Delphinium, page 44.

## LINUM (Scarlet Flax)

This is a very pretty free flowering annual with slender foliage and bearing on delicate stems clusters of bright red flowers, saucer-shaped with black center. The flowers last only a day, but are borne uninterruptedly until frost.

Culture- If sown in hotbed and transplanted into good rich soil one foot apart the period of flowering will be much advanced, but the seed may be sown in the open ground after the weather is warm.

Grandiflorum Rubrum. The favorite scarlet flax, large flowered, height $11 / 2$ feet. Pkt., 10c.

## LOBELIA

The dwarf variety (Erinus) bloom very quickly from seed and flower all through the season. They are well adapted for bedding, pots or rockeries. Also very effective when planted in masses.
Culture-Seed may be sown outdoors in early spring where the plants are to grow, and thin moderately or transplant several inches apart in rich open soil, or start the plants in pots in greenhouse or hotbed and later transplant after danger of frost is past.

Crystal Palace Compacta. An exceptionally graceful sort having beautiful deep blue flowers, with very dark green foliage. Height, 7 inches. Pkt., 10c.

## Love Lies Bleeding. <br> See Amaranthus Caudatus, page 37.

Love in a Mist. See Nigella, page 50.

## LUPINUS (Lupine)

Old-fashioned favorites that thrive in almost any soil or situation. They are of robust branching habit, and throw spikes enveloped with pea-shaped flowers for most of their length. If these are cut as they mature the plants will continue in bloom for a long period.
Annual Varieties. Splendid for beds and backgrounds. Height, 2 to 3 feet.

| Hartwegii | (Blue) | Pkt., 10c. |
| :---: | :---: | :---: |
| " | (White) | " |
| ، | (Rose) | " |
|  |  | oz., 40c |

Perennial Varieties. The hardy perennial varieties are extremely handsome and stately, bearing their beautiful flowers on erect graceful spikes that are more than a foot in length. Excellent for grouping or massing in separate colors, and they suit themselves to almost any position, making a good cut flower and of easy culture, requiring ordinary moist soil deep as possible, but well drained with plenty of old stable manure in any open sunny position. Height, 3 to 5 feet.

Culture-Sow seeds in April in their permanent places, transplanting or thinning as may be required.

Polyhyllus Rosens. (Rose)—magnificent.......Pkt., 20c.


## LYCHNIS

## (Rose Campion-Ragged Robin)

A fine perennial, useful for the mixed border. Flowering freely in early summer and almost continuously if the old flower spikes are regularly removed. The bright scarlet flowers are very striking and showy.

Culture-If sown early will bloom the first season. Seed may be started under glass or sown in the open as soon as the ground is in condition and danger of frost is past. Transplant or thin out to 9 inches apart.

Chalcedonica (Scarlet). Height, 2 feet. Pkt., 10c.

## MARIGOLD

The African and French Marigolds are old favorite freeflowering annuals of easy culture. Both are extremely effective and are well adapted for large beds or mixed borders. They succeed best in a light soil with full exposure to the sun. A vase or bowl of any of the rich yellow sorts in combination with a few blue Larkspurs or Cornflowers is very striking.


Culture - For early blooming sow in sunny window or frame in early spring or in good rich soil in the open after all danger of frost is past. Transplant or thin out, 10 to 16 inches apart.

## DWARF DOUBLE FRENCH MARIGOLD

Few annuals are as effective as the French Marigolds for so long a period. They all form dense bushes not over 12 inches high and are unequaled for beds or borders.

Golden Ball. A splendid pure golden yellow; large flowers; very effective for beds. Pkt., 10c.

Mahogany. Rich velvety mahogany brown. Pkt., 10c.
Dwarf Double French Mixed. Splendid mixture of all double sorts. Pkt., 10c.; 1/4 oz., 20 c .

## DWARF SINGLE FRENCH MARIGOLD

Legion of Honor (Little Brownie). This is a single dwarf bushy variety, and is very desirable for borders. The plants bear in profusion, rich golden yellow flowers marked with a large spot of velvety crimson at the base of each petal. Begin flowering early and continuing until frost. Height, 12 inches. Pkt., 10c.; 1/4 oz., 20c.

## TALL DOUBLE AFRICAN MARIGOLD

Splendid for beds or borders. The tall varieties growing about 3 feet high.

Orange Prince. A high bred, tall growing variety, bearing large perfect double quilled flowers of a rich deep golden orange color. The finest of all and very showy. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 25 \mathrm{c}$.
Lemon Queen. A counterpart of Orange Prince, except in color which is a soft lemon yellow, and forming a fine contrast to the rich orange of the former. Pkt., 10c.; $1 / 4 \mathrm{oz}$., 25c.

Tall African Double Mixed. A splendid mixture, containing all the colors of the African varieties. Height, 2 to 3 feet. Pkt., 10c.; 1/4 oz., 20c.

## Marvel of Peru. See Mirabilis, page 49.

## MESEMBRYANTHEMUM (Ice Plant)

Profuse flowering plants having leaves covered with ice-like globules. Very effective in beds, baskets or edgings, and for rock work.

Culture-Thrive best in dry sunny situations. Start plants indoors, transplanting into the garden when danger of frost is past. May be propagated by cutting.

Crystallinum (Ice Plant). Height, 6 inches. Pkt., 10c.

## MIGNONETTE <br> (Reseda)

A well known hardy annual producing dense cone-shaped flower spikes made up of thickly set florets of modest colors. It is of ten used for cutting to combine in bouquets with other more pretentious flowers lacking its delicate and pleasing fragrance.

Culture-Seed is usually sown out doors after danger of frost is past, but if sown at intervals in spring and early summer a succession of bloom is assured till frost. Well pulverized soil, preferably light sandy loam, should be used, covering the seed about $1 / 4$ inch deep. Make rows one foot apart, thin out to six inches. For early blooming seed may be sown in the fall or started indoors and transplanted. Thrives in cool temperature. May also be grown in pots.

Red Goliath. One of the finest, being of strong growth, healthy and deep-rooting. The average spikes of flowers are immense, measuring six to eight inches long by $21 / 2$ inches in diameter, and are compactly filled with giant florets, measuring $1 / 2$-inch across and packed full, even in the center, with anthers, or three times as many as the older Mignonettes contain, consequently this variety is correctly called a double Mignonette. The color of the florets-fire-red-is strengthened on account of the density of the florets and spikes, thus presenting almost solid columns of brilliant-red, effectively contrasted against the healthy, rich green foliage. The fragrance is delightfully rich and powerful. For cutting it is perfection, remaining fresh for eight to ten days in water. Pkt., 10c.; $1 / 8 \mathrm{oz}$. 25c.

Golden Machet. Distinct variety of Machet with massive spikes of golden-yellow blossoms. Pkt., 10c.; $1 / 4 \mathrm{oz}$., 20 c .

Sweet-scented (Reseda Odorata). The popular garden variety, with rather small spike, but very sweetly scented. Pkt., 10c.; oz., 20 c .

## MIMULUS

Tender little plants with singularly shaped and brilliant colored flowers, blotched in every conceivable manner. Excellent for baskets or vases.

Culture-Sow in fine soil in boxes or pots placed in a sunny window or frame. Transplant the seedlings when large enough to handle.

Moschatus (Musk Plant). An old fashioned favorite plant of spreading or trailing habit with a peculiar and pleasing musk odor. Succeeds best in cool, moist locations or partial shade. Pkt., 10c.

## MIMOSA (Sensitive Plant)

Curious and interesting annuals which bear pinkish-white flowers. The leaves close and droop when touched or shaken.
Culture-Start indoors in March, set out in May after danger of frost is past, six inches apart.

Pudica. Height, 18 inches. Pkt., 10c.

## MIRABILIS <br> (Four-o’Clock, Marvel of Peru)

The flowers of this old time favorite open about 4 o'clock in the afternoon and fade the next morning. Two feet high with bright foliage and fragrant flowers of desirable colors. Makes a nice hedge if set a foot apart.

Culture-Seed should be sown in the open ground where plants are desired. The roots may be taken up in the autumn and preserved through the winter for spring planting in the same manner as dahlias.

Jalapa Mixed. All colors. Pkt., 10c.; oz., 20c.

## MOMORDICA

Handsome and ornamental climbing half hardy annuals with warted golden-yellow fruit which when ripe, opens and discloses its seeds and brilliant carmine interior. Excellent for covering trellises, rockwork, etc. Height ten feet.

Culture-Sow seed outdoors in May.
Balsamia (Balsam Apple). Apple shaped fruit, glossy, green foliage, often used for its medicinal properties. Pkt., 10c.; $1 / 2$ oz., 20 c .

Charantia (Balsam Pear). Pear shaped fruit, heavy green foliage. Pkt., 10c.; $1 / 2$ oz., 20 c .
Moonflower. See Ipomoea Mexicana, page 47.
Morning Glory. See Convolvulus, page 42, and Ipomoea, page 47.
Mourning Bride. See Scabiosa, page 53.

## MYOSOTIS

## (Forget-me-not)

These popular charming little plants, producing star-like flowers, love cool, moist soil and like pansies, bloom most freely in fall and early spring. They make beautiful close borders or edgings and will bloom nicely in winter in a cool room or coldframe.

Culture-Start indoors in February, if blooms are wanted first year, and transplant in warm sunny border in April. They establish themselves by self-seeding. Seed may also be sown in fall.

Alpestris-Victoria. A favorite sort with fine head of large globular sky-blue flowers. Plants bushy and compact, fine for borders, pots or cutting. Pkt., 10c.

## NASTURTIUMS

No other hardy annual excels Nasturtiums for their ease of culture, brilliancy of coloring and lavish profusion of flowers for so long a time with the small outlay of time and labor. The maximum of bloom is produced on thin soil and never flags through the hottest weather. In soil too rich leaves predominate and the plants are apt to rot off in wet weather, especially if standing too close. The tall varieties make a very effective display when trained on fences or trellises and the dwarf sorts are fine for edging and massing.

The varieties offered below were selected as being the best and most distinct.

## IVY LEAVED NASTURTIUMS

All with fine fimbriated petals. Colors intense and very striking. Foliage also very beautiful, like ivy, and vines exceedingly graceful. For a garden they are superb, but for window culture they are very fine.
Ivy Leaved Tall Mixed. Pkt., 15c.; oz., 25c.


## DWARF OR TOM THUMB VARIETIES (Tropaeolum Nanum)

These have a neat compact habit and attractive foliage. They bloom in two months from sowing and furnish the greatest abundance of long-lasting, sweet-scented cut-flowers.

Chameleon. Is unique in bearing flowers of quite distinct coloring on one and the same plant.

Crystal Palace. Sulphur, maroon blotches.
Empress of India. Very dark leaves, fiery-crimson flowers. Golden King. Pure golden-yellow.
King Theodore. Velvety red flowers, dark foliage.
King of Tom Thumb. Intense dark scarlet, dark leaves.
Prince Henry. Cream, spotted and tipped red.
Rose. Soft carmine-rose.
Vesuvius. Salmony-rose, dark leaved.
Price: Any of the above sorts, pkt., 10c.; oz., 20c.; $1 / 4 \mathrm{lb}$., 60c.

Finest Mixed. Tom Thumb varieties, all colors. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 50 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.50$.

## TALL VARIETIES

## (Tropaeolum Majus)

Elegant and luxurious climbers for trellises, etc. May also be used to cover unsightly railings and to trail over rough ground with fine effect.

Jupiter. Large rich golden-yellow flowers.
King Theodore. Deep crimson-maroon, dark foliage.
Moonlight (Pearl). Creamy-white.
Dunnetts Orange (Sunlight). Bright orange flowers, no markings.

Prince Henry. Light yellow, marbled scarlet.
Schulzi. Rich deep scarlet.
Vesuvius. Salmon-rose, dark leaved.
Price: Any of the above tall sorts, pkt., 10c.; oz., 20c.;
$1 / 4 \mathrm{lb} ., 60 \mathrm{c}$.
Finest Mixed: Tall or climbing varieties, all colors, pkt.,10c.: oz., 15c.; $1 / 4 \mathrm{lb} ., 50 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.50$.

## NEMOPHILA <br> (Love Grove)

Very pretty dwarf-growing hardy annuals of easy culture. Has small cup-shaped, exquisitely colored blossoms about one inch in diameter. Good in pots, edgings, rockeries, or beds, doing best in moist soil and partial shade.

Culture-Seed may be sown outdoors after danger of frost has passed, thinning out when the plants are well established to prevent crowding. May be started indoors, transplanting to the open after ground has become warm.

Mixed. All colors. Pkt., 10 c .

## NICOTIANA

(Flowering Tobacco)
Half hardy annuals, of bushy habit, literally ablaze with tubular shaped flowers all summer. A handsome bedding plant. Height 3 to 4 feet.

Culture-Sow seed outdoors, in good rich soil, after all danger of frost is past, thinning out or transplanting after the plants are well established. Seeds may be started indoors, and later transplanted after ground has become warm, and the weather thoroughly settled.

Sanderae Hybrids. A splendid type in a great variety of colors. Pkt., 10c.

## NIGELLA <br> (Love in a Mist)

Another popular name for this fine old annual is "Devil in the Bush." With the blue and white flowers surrounded by a mist of slender fibrous leaves, it is always pretty and attractive. Of easy culture and useful for cutting.

Culture-Sow seed $1 / 4$-inch deep in open ground after weather has become thoroughly settled, thinning out to 6 inches apart.

Damascena. Blue and white mixed. Pkt., 10c.

## PANSIES

Pansies are too well known to require any description as they are favorites with all. For best results you must start with a good strain. The finest Pansies are, as a rule, shy seeders, which accounts for the difference in the price of the various mixtures offered.

Pansy seed germinates and the plants grow more freely in the cool, early days of spring, and for summer-blooming should be sown by the latter part of April, or early in May, in the vicinity of Philadelphia. A soil containing a proportion of leaf mould, well enriched with well-decayed cow manure, will be the most satisfactory for the growing of this flower, and it should be well dug and made fine and level.

Sow the seeds in drills, covering them not more than four times their diameter and firming the soil well above them. The seeds germinate in from 8 to 12 days, and should not be allowed to dry out during this period. Covering the seed bed with newspapers will prevent this and hasten somewhat the period of germination.
As soon as the plants are up and large enough to handle, they should be thinned out or transplanted to stand nine inches apart in the rows. Thorough cultivation should be given from the start, as Pansies will not thrive when obliged to share the beds with a mass of weeds.

It is a mistake to plant Pansies in the shade of a tree or buildings. An open exposure, where the wind has a free sweep over the bed is far better, and Pansies so planted are free from the long, straggling branches which produce few and inferior flowers. During dry weather the bed should be watered daily, and in extreme cases twice a day for the best results.
Seeds sown in April or May will produce blooming plants by the last of June, which will give an abundance of flowers throughout the remainder of the season. About the middle of August is the best time for starting Pansy seeds for early spring blooming, as this allows the plants to go into winter in vigorous condition.

Mingle's Royal Exhibition Mixture. For the lover of fine Pansies, this mixture cannot be surpassed. It contains the largest and most beautiful of all blotched Pansies that have been developed after years of careful and close selection. It contains only well-formed, expanded flowers of uniform large size with an unusual range of colors and markings. The texture of the blooms is heavy and thick, so that the blooms are well waved and crinkled on the edges. The large flowers are borne upon long stiff stems which hold them well above the green foliage and make them admirably suited for cutting. We
have paid particular attention to include only compact, rounded plants of sturdy habit and profuse blooming qualities. Not only do the flowers bloom profusely, but they also bloom continuously throughout the spring, summer, and fall, and where the weather remains cool the flowers will not decrease in size during the late season. The seed is necessarily expensive but it is well worth all it costs. Pkt., 35c.; $1 / 8 \mathrm{oz} ., \$ 1.50 ; 1 / 4 \mathrm{oz} ., \$ 2.75$.


GIANT TRIMARDEAU PANSIES
We have discarded the ordinary Pansies in separate colors in favor of this type which produces very large flowers, plants of strong, robust growth and well adapted to the trying'conditions of our climate.

Emperor William. Ultramarine-blue with violet-purple eyes. Very pleasing shades. Pkt., 10c.; $1 / 4$ oz., 65 c .

Fairy Queen. Bright blue, margined with pure white; large flowers, extra fine. Pkt., 10c.; $1 / 40 \mathrm{oz}$., 65 c .

Goldelse. Pure spotless canary-yellow. Pkt., 15c.; $1 / 4 \mathrm{oz} ., 75 \mathrm{c}$.
King of the Blacks. Almost jet-black, extra large, fine flowering. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 65 \mathrm{c}$.

Lord Beaconsfield. Top pale lavender, shading to purpleviolet on lower petals. Very large and exquisitely marked. Pkt., 10c.; $1 / 4$ oz., 65 c .

Snow White (Candidissima). Extra fine, pure spotless white. Pkt., 15c.; 1/4 oz., 75c.

Yellow (with black eye). Extra large, a splendid bedding variety. Pkt., $15 \mathrm{c} . ; 1 / 4 \mathrm{oz} ., 75 \mathrm{c}$.

Giant Trimardeau. A fine mixture of all colors. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 50 \mathrm{c}$.; oz. $\$ 1.50$.

Mingle's Giant Mixture. This mixture comprises a large number of colorings and is intended to supply the want of a first-class mixture at a moderate price. Pkt., 20c.; $1 / 8$ oz., 75c.

## ORCHID-FLOWERED PANSIES

In the new Orchid-Flowered Pansies we have some rare and exquisitely dainty shades. The new and unusual combinations of color tones suggest the delicate tropical colors of the aristocratic Orchid, which may truly be said to "beggar description." The flowers are gigantic in size, of perfect shape and borne on long stems. The petals are beautifully ruffled and their velvety texture intensifies the rich effect of the dainty shades of color.
Orchid Mixed. Rare light shades, large frilled flowers, very attractive. Pkt., 15c.; $1 / 8$ oz., 75c.

## VIOLA CORNUTA <br> (Tufted Pansies)

While the flowers of the Tufted Pansies are not so large as the regular type, yet they bloom so freely that they are superior to pansies where effect is wanted, the colors being particularly clear and distinct; they also bloom for a longer time. Seed sown in April produces flowering plants by June, and from then on until frost they are a sheet of bloom.

Papillo (Butterfly Violet). Lovely violet-lilac, with small, dark eye. Pkt., 15c.
Lutea Splendens. Rich golden-yellow. Pkt., 15c.
Admiration. Large dark-blue flowers. Pkt., 20c.
Mixed. A splendid mixture of the best varieties. Pkt., 15 c .; $1 / 4 \mathrm{oz} ., 75 \mathrm{c}$.

## PASSIFLORA <br> (Passion Flower)

A magnificent half hardy perennial climber with beautiful flowers, blooming luxuriantly from early summer until fall.

Culture-Sow indoors in spring, and transplant after danger of frost has passed. Train vines along fence or trellis.
Coerulea. Sky-blue flowers. Pkt., 10c.

## PENSTEMON

## (Bearded Tongue)

Handsome half hardy perennials, growing about two feet high, and are very effective for beds and borders. The flowers, bellshaped or tubular about two inches long, are borne on long graceful spikes and include a wide range of colors, from pure white to maroon with all intermediate shadings.
Culture-Sow seed outdoors in well pulverized rich soil after ground has become warm and weather thoroughly settled, thin out or transplant after plants have become established to prevent crowding. May be started indoors, setting plants out in the open after danger of frost has passed.

Mixed. A great variety of kinds and colors. Pkt., 10c.

## PETUNIA

We have no better plants than the Petunias for beds and masses, borders, window-boxes, baskets and vases. Once fairly started, they grow almost as easily as weeds and furnish a glorious succession of bloom from early summer until frost. The largeflowered strains are very beautiful and of almost endless variety. Seed of the double and giant-flowered Petunias is made expensive by the great amount of labor involved in hand-fertilization, and it is well to handle seed and tiny seedlings with some care.
Culture-Sow in hotbed, coldframes, or in boxes of fine soil in the sunny windows of a warm room in April or May, and transplant about one foot apart in garden beds. Seed of the double varieties has not so much vitality as that of single sorts and needs a little more care in watering to be sure of germination.


SINGLE LARGE FLOWERING
Giants of California. Flowers very large, in great variety of colors and markings with deep yellow throats. Pkt., 35c.

White. Clear paper-white flowers of unusual size. Pkt., 25c.
Single Mixed. Pkt., 15c.; $1 / 8$ oz., 25c.

## SINGLE BEDDING VARIETIES

Smaller flowered sorts, most valuable for beds and masses. Height, one foot.
Howard's Star. Rich crimson distinct white star in the center, very showy and attractive. Pkt., 10c.; $\frac{1}{16}$ oz., 30c.
Rosy Morn. Bright rosy-pink with white throat, very charming, compact and free flowering, for bedding. Pkt., 10c.; $\frac{1}{16}$ oz., 40c.
Single Mixed. All colors. Pkt., 10c.; 1/8 oz., 20c.

## DOUBLE LARGE FLOWERING

Double Large Flowering. Beautiful varieties in mixture. Pkt., 25c.

Fancy, Large Flowered, Fringed, Mixed. Flowers of large size and beautiful shape, deep-throated and of varied and brilliant colors beautifully fringed. Pkt., 35c.

## PHLOX

The hardy annual Phloxes are dazzling in effect, particularly so when sown in masses or ribbon beds of contrasting colors. Few flowers are as easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost and care. There are few desirable colors beyond their range, and if given good soil and plenty of water, they will furnish a long supply of delicate flowers.

Culture-For pot culture dwarf varieties are valuable and as an undergrowth for tall, bare-stemmed plants they are also valuable. The first sowings should be made as soon as the frost is out of the ground in spring, later ones in May, either where the plants are to bloom, or in a seed-bed, as the Phlox transplants readily. In transplanting set the taller kinds about a foot apart; if planted too thickly they suffer from mildew. Cutting away the flowers and seed-pods makes the plants more bushy and compact, and lengthens their blooming time. Average height, one foot.

## DRUMMONDII GRANDIFLORA (Height 15 inches)

This section has beautiful, round-petaled flowers, larger than in the older sorts; showy and constant, blooming in the greatest profusion from early summer to frost. Our strain is far superior to that ordinarily sold.

Pkt., $1 / 4 \mathrm{oz}$.
Alba. Pure white flowers, borne in great profusion. 1fc. 35 c
Crimson. Bright color..
Coccinea. Large brilliant scarlet, very free flower-
ing. ................................................
Rosia. Rose color . . . . . . . . . . .
Violacea. Violet
66

Grandiflora Mixed. Contains a mixture of all colors and makes a very showy border or bed. Pkt., 10c.; 1/4 oz., 25c.
[STAR PHIOX (Height 9 inches)
Of dwarf habit with very pretty star-shaped flowers. A novel variety.

Cuspidata Mixed. All colors, very fine. Pkt., 10c.; $1 / 4 \mathrm{oz}$., 40c.
|HARDY PERENNIAL PHLOX (Height 24 inches)
Decussata. One of the finest perennials, producing large heads of colored flowers, blooming in August and September.

Finest Mixed. Pkt., 10c.; $1 / 4$ oz., 50c.
Periwinkle. See Vinca, page 56.
Pinks. See Dianthus, page 44.

## PORTULACA

This charming little hardy annual is unrivaled for brilliancy among bedding plants. Through the driest, hottest seasons it flourishes amazingly, carpeting the ground with a mat of succulent foliage that in the afternoon is hidden by gayest of flowers. Fine for massing in beds, edging rockwork and frequently used to cover sunny banks. As an undergrowth for taller plants it is also valuable.

Culture-The seed does not germinate until hot weather, and should be sown late, plants require little care and can be transplanted in full flower. A good plan is to mix the seed with three or four times as much sand or dry earth to get a more even distribution in sowing.
Single Mixed. Pkt., 10c.; 1/4 oz., 25c.

## DOUBLE VARIETIES

These flowers are so full and perfect as to resemble tiny roses, increasing in size and beauty as the season progresses.
Double Mixed. A splendid assortment of all colors. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 75 \mathrm{c}$.

## POPPY

## (Papaver)

Before tulips are fairly gone our gardens begin to be gay with Poppies. Few flowers have the same grace of stem, airiness of poise, and delicacy of tissue. For beds and borders, with a back ground of green, there is nothing finer. Some sorts are admirable for naturalizing in open wooded grounds; others, like the Shirley, are beautiful for cutting.

Culture-A sandy loam suits Poppies best, and, as their strong tap-roots are difficult to transplant, it is well to sow the seed where the plants are to bloom. Sowings made in fall and at intervals in spring will provide a long succession of flowers. Sow thinly, covering very lightly, and thin the plants to stand about a foot apart. The best plants are those grown from early sowings while the soil is cool and moist.


## SINGLE ANNUAL POPPIES

Shirley. A splendid strain of annual poppies of the greatest variety of colors. They range in color from the purest white through the delicate shades of pale pink, rose, and carmine to the deepest crimson and deep red. Of easy culture and very free bloomers.

Shirley Single Mixed. Pkt., 10c.; 1/2 oz., 20c.
Admiral. A single peony-flowered variety of surpassing beauty, having large, smooth-edged flowers of glistening white, with a broad band of brilliant scarlet round the top. These two colors form a striking contrast, and when planted in groups produce a magnificent effect. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 20 \mathrm{c}$.

Danebrog, or Danish Cross. Very showy variety, producing large flowers of brilliant scarlet, with a silvery white spot on each petal, forming a white cross. Pkt., 10c.; oz., 20c.

King Edward. A new variety of gorgeous coloring, being a deep scarlet, shaded crimson-red, each petal marked with a large black blotch for half its length from the base, against which the yellow anthers stand out in bold relief. The plant grows $21 / 2$ feet high, and produces its very large flowers with great freedom. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 25 \mathrm{c}$.
Tulip Poppy (Papaver Glaucum.). One of the most brilliant; the flowers are three inches across and closely resemble the brilliant Scarlet Gesneriana Tulip. Height two feet. Pkt., 10c.; $1 / 4 \mathrm{oz}$., 25 c .
Single Mixed. All colors. Pkt., 10c.; oz., 20c.

## DOUBLE ANNUAL POPPIES

American Flag. A beautiful variety, large double snowwhite flowers bordered with scarlet. Pkt., 10c.; $1 / 2$ oz., 25c.
"Mikado" (The Striped Japanese Poppy). This beautiful Poppy is very distinct in character and color. The flowers are brilliant scarlet and white with elegantly curved petals, resembling a Japanese Chrysanthemum. Pkt., 10c.; oz., 30c.

Carnation, Flowered. Splendid double-fringed flowers, all colors mixed. Pkt., 10c.; $1 / 2$ oz., 20 c .

## HARDY PERENNIAL POPPIES

Orientale (The Large Oriental Poppy). A charming summerflowering hardy plant, producing numerous leafy stems about $21 / 2$ feet high, with large deep crimson flowers; having a conspicuous black blotch on each petal, exceedingly showy. Pkt., 10c.; $1 / 4$ oz., 30c.

Nudicaule (Iceland Poppy). These hardy perennials flower the first year from seed, blooming almost as quickly as the annual sort. They are of graceful, neat habit, with bright green fernlike foliage, formed in tufts, from which issue slender stalks about 12 inches high, bearing their brilliant flowers in endless profusion; most useful for cutting, for which purpose pick when in bud, and, if the seed pods are picked off, continue in flower the entire season. They remain evergreen throughout the winter, coming into bloom early the following spring.

Finest Mixed. Pkt., 10c.; $1 / 4$ oz., 25c.

## PRIMULA

## (Primrose)

The Primula stands in the front rank among greenhouse plants and is fine for winter and spring blooming. It is free flowering and is especially valuable for cut flowers and for house and window culture. A cool place suits it best.

Gulture - Sow the seed in drills in a light rich soil in shallow boxes at any time from the middle of March to the end of May, the earliest seed sown will naturally produce the first blooms. Cover the seed about $1 / 8$ inch and press the soil on them with a bottom of a pot or a board. Water moderately, avoid forcing the seed. The plants must be well ventilated, well watered and slightly shaded.

## CHINESE PRIMROSE

Crimson King. Crimson, fine shade, beautifully fringed. Pkt.; 35c.

Alba Magnifica. Pure white fringed, extra choice. Pkt., 25c.
Rosy Morn. Beautiful soft pink color, very large blooms, solid and erect, extra free flowering and extremely attractive. Pkt., 40c.

Stellata Mixed. A very pretty form with large heads of star-shaped flowers of various colors, splendid for decorative purposes. Pkt., 25c.

Chinese Mixed. Contains a mixture of the finest fringed large flowering sorts. Pkt., 25c.

## PYRETHRUM

Showy, hardy perennial growing two feet in height with most brilliant and lasting flowers. P. Aureum is the well-known variety so much used for edging, bedding, and borders.

Culture - Sow seed outdoors early in the spring. May be started indoors for early flowering.

Parthenfolium Aureum (Golden Feather). Yellow, fernlike leaves, fine for edgings. Height about eight inches. Pkt., 10c.; $1 / 4$ oz., 25c.

Single Mixed. Pkt., 10c.

## RHODANTHE

A charming half hardy annual, valuable for pot culture or for the garden. Flowers are everlasting, much prized for winter bouquets. Glaucous-gray foliage.

Culture - Sow thinly in boxes of fine soil under glass, and transplant after ground has become warm and weather settled, setting plants about nine inches apart.

The flowers should be cut before they are fully expanded and dried slowly, hung stem ends up, keeping them out of the sun.

Maculata Mixed. Pkt., 10c.

## RICINUS <br> (Castor Oil Bean)

Picturesquely showy and imposing, the Ricinus gives to the garden magnificent semi-tropical effects. Grown as a specimen it makes a perfect pyramid of gigantic leaves; a dozen plants in a large bed show a glorious mound of glistening colors and may be admired from a long distance; planted thickly it soon forms a handsome screen or hedge.

Culture-Sow seed outdoors when all danger of frost is over, sow two inches deep, about three feet apart. Seed may be started under glass and later transplanted.

Zanzibariensis Mixed. A distinct class which surpasses in size and beauty all varieties. The different varieties included in our mixture have light and dark green leaves and some of coppery-bronze changing to dark green, with reddish ribs. The seeds are beautifully marked. Pkt., 10c.; oz., 20c.

## SALVIA <br> (Flowering Sage)

A standard bedding plant that keeps the garden bright with color until late in autumn. For pot culture, for cutting and for borders, etc., it is very valuable.

Culture-Start plants indoors, in February or March, and transplant to the garden about May 15th. May be taken indoors in the fall as a house plant.


SPLENDENS
(Scarlet Sage)
${ }^{-6}$ These are the well-known bedders, single plants of which carry many long flaming flower spikes open at one time, keeping up the display until frost.

Grandiflora. A rich-flowered bedder, long spikes. Height, three feet. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 60 \mathrm{c}$.
America or Globe of Fire. The dwarf plants are of compact, rounded growth. Each spike is closely set with mammoth size flowers of the most brilliant scarlet. It begins to bloom early in the season and continues until cut down by frost. Grown in solid beds, it is an impressive sight, since the flowerspikes hide the foliage completely and look just like a mass of fire. Pkt., 15c.
Patens (Blue Sage). A tender perennial variety with erect stems, bearinz large, broad, tubular-lipped flowers of a most superb, rich blue coloring. Can be kept as a house plant in a warm rom during the winter. Pkt., 20c.

## SALPIGLOSSIS <br> (Painted Tongue)

Half hardy annuals bearing beautiful funnel-shaped flowers, having dark veins on a ground which varies from white to crimson, yellow, orange, etc., and intermediate shades. Very effective in beds, borders, or edgings. Height, two feet.

Culture-Start seed in March, indoors, for early flowering. Set outdoors in May, one foot apart each way. Begins to bloom in August and continues until frost.
Purple and Gold
Scarlet and Gold
White and Yellow
Crimson
Finest Mixed. Pkt., 10c.; $1 / 4$ oz., 40 c .

## SCABIOSA

## (Mourning Bride-Pincushion Flower)

Well-known hardy annuals, its great abundance and long succession of richly colored cone or pin cushion shaped blossoms, borne on long stems make it one of the most decorative of all garden flowers. The flower stems are long and the blossoms last for about a week after being cut. Height, two to three feet.

Culture-Sow seed outdoors in good rich soil after all danger of frost has passed, thinning out to two feet apart or transplant to prevent crowding. If started indoors young plants should not be set out until the ground has become warm and weather thoroughly settled.

## TALL, LARGE-FLOWERING, DOUBLE

Azure-Fairy. This magnificent Scabiosa bears an abundance of perfectly double, long-stemmed flowers that come uniformly of a lovely sky-blue color. The outer petals are particularly broad and the flowers are larger than any other variety. Most attractive in the garden. There are but few flowers so useful for cutting. Pkt., 10c.; $1 / 4 \mathbf{~ o z}$., 35c.

Flesh. Pkt., 10c.
Fiery Scarlet. Pkt., 10c.
Royal Purple. Elegant deep black-purple flowers with white pistils. Pkt., 10c.; $1 / 4 \mathbf{~ o z} ., \mathbf{3 5 c}$.

Snowball. Charming douple white flowers. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 35 \mathrm{c}$.

Tall Large-Flowered Double, Mixed. The colors range from white to rich pink, crimson to deep red, lilac to almost black. Pkt., 10c.; 1/2 oz., 30c.

Dwarf Double, Mixed. Of compact habit, bearing globeshaped double flowers. Pkt., 10c.; $1 / 2 \mathrm{oz} ., \mathbf{3 0 c}$.

## Scarlet Runner Beans. See Pole Beans, page 11.

## SCHIZANTHUS

(Butterfly Flower)
Wonderfully showy annuals; very decorative for garden beds and unsurpassed in pots for the conservatory, where by successive sowing a continuous display may be enjoyed almost the year round. The plants are of compact, branchy growth, $11 / 2$ to 2 feet high, and are literally sheeted with exquisite, butterfly-like flowers which include beautiful new color combinations.

Culture-Seed may be sown indoors, but usually sown in the garden where plants are to remain.

Wisetonensis Hybrids, Large-flowering, Mixed Colors. Beautiful colors and combinations in great variety. Pkt., 15c.

## MAKE YOUR GARDEN A WONDER GARDEN by the use of STIM-U-PLANT

An effective concentrated plant food in tablet form. It makes more flowers and flowers more beautiful.

EASY TO USE
Simply insert tablets in soil near plants, or dissolve in water at the rate of four tablets to the gallon and apply as liquid manure. Complete directions with every package.

Price, small size, 25 c .; 100 tablets, 75 c .

## SMILAX

A graceful climbing plant with small, beautiful, glossy green foliage which is used for table decoration and with bouquets.

Culture-Soak seed in warm water for 24 hours before planting, as it germinates slowly. Even then it requires eight weeks before the plant appears. May be planted in pots or baskets. Pkt., 10c.

Snapdragon. See Antirrhinum, page 37.
Snow on the Mountain. See Euphorbia, page 45.

## STOKESIA (Cornflower Aster)

This popular hardy perennial bears large lavender colored cornflower-like blossoms which continue in bloom all summer. Useful for borders, beds, also fine for cutting.

Culture-Start plants indoors and transplant to the garden in May not closer than eight inches apart. May be, also, started indoors and later transplanted after weather has become settled.

Cyanea. Blue flowers. Pkt., 10c.

## STOCKS

Stocks have good habit, fine leaves, beautiful and fragrant flowers, a long season of bloom and adaptability to many conditions of culture. They are unsurpassed for edging, borders, or for pot culture and for cutting. Average height, 1 to $11 / 2$ feet.

Culture-For early flowers, sow seed under glass in March or April, transplanting the seedlings when an inch high into other pots or boxes, or into fine soil spread over some discarded hot bed. In May transfer to garden beds of deep rich soil, setting the plants one foot apart. Transplanting several times in the early stages of growth tends to make the plants more dwarf and compact. For later flowers, seed may be sown in the open in May. If plants that begin to bloom late are carefully potted in the fall, they will flower finely all winter in a house that is moderately cool and moist.

## DOUBLE FLOWERING DWARF TEN-WEEK STOCKS

Early maturing, large flowering, particularly suited for pot culture, beds or edging. Height, eight inches.

Canary Yellow. . . . . . . . . . . . . . . . . . . . . . . . . . . . . Pkt., 10c.

| Crimson | " |
| :---: | :---: |
| Dark Blue. | ، |
| Rose. | ، | White................................................. . . . " Mixed. All colors. Pkt., 10c.; $1 / 8$ oz., 40c.

## DRESDEN PERPETUAL OR CUT AND COME AGAIN STOCKS

Excellent for cutting, very fine for outdoor planting.

| Canary Yellow. | Pkt., 10c. |
| :---: | :---: |
| Crimson | " |
| Rose. | ، ${ }^{6}$ |
| Violet. | ، ، |
| Princess Alice. Pure white. | ، ، |

## Strawflower. See Helichrysum, page 46.

Summer Cypress. See Kochia Trichophylla, page 47.
Sunflower. See Helianthus, page 46.
Sensitive Plant. See Mimosa, page 49.

## SILENE <br> (Catchfly)

An easy growing hardy annual, very free flowering, producing dense clusters of pink, white and red blossoms. The plant is covered with a glutinous moisture from which flies cannot disengage themselves, hence the name. Height, 18 inches.

Culture-Seed should be planted in the open ground after danger of frost is past, or may be started indoors, transplanting to the open as soon as warm weather appears. A rich garden soil, liberally enriched with manure is best.

Mixed. Red, white and pink shades. Pkt., 10c.
Swan River Daisy. See Brachycome, page 39.

## Sweet Sultan. See Centaurea Imperialis, page 41.

## SWEET WILLIAM (Dianthus Barbatus)

For many years the Sweet William has been esteemed as one of our finest hardy garden plants, being of easy culture, thriving in any good garden soil, and lasting for years. The best varieties of Sweet Williams are of exceedingly beautiful colors and the large fragrant flowers are borne in trusses of great size. They make a splendid show as a border flower and last well as cut flowers.

Culture-Sow seed early in spring when danger of frost is over, in rich, mellow soil, covering the seed about $1 / 4$ inch with fine pressed soil, well pressed down. When two inches high thin to six inches apart. Seed can also be sown in fall. There are usually no flowers until the second season, unless started very early under glass and transplanted when blooms may be had in autumn. Old roots may be divided and reset each spring.


Scarlet Beauty. Large single flowers of intense scarlet. Pkt., 10c.

Pink Beauty. Large single flowers of pure pink. Pkt., 10c.
Hunts Perfection. Single flowered, various shades with white eye and white bordered. Pkt., 10c.

Single-White. Pkt., 10c.; $1 / 4$ oz., 20c.
Single Mixed. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 20 \mathrm{c}$.
Giant Double Mixed. Pkt., 10c.; $1 / 1 / \mathrm{oz} ., 25 \mathrm{c}$.

## MINGLE'S SWEET PEAS

Every garden should have a row of Sweet Peas. A nice row of them will provide you with a beautiful bouquet day after day. Plant them early, give them good rich soil, pick the blossoms every day and you will be richly rewarded for your trouble.

Culture-Sweet Peas do best in good, rich soil that is inclined to be a little clayey. Fall is the best time to prepare the soil, especially if manure is used. Pea vines like moist soil and often the heat originated by the manure combined with the heat from the sun is too much for the vines. They turn yellow and die. Use a good commercial fertilizer or else apply the manure in the fall. Dig a trench a foot deep and about 16 inches wide and mix in this about six inches of top soil with good manure or commercial fertilizer. Plant the seeds in this trench in two rows, dropping the seeds about two inches apart. Cover about two inches deep and then gradually fill the trench as the plants grow. The trench should be made so the water will drain off. The seed should be planted just as early in the spring as possible, as late sowing produces rank growth but few flowers. Provide a trellis, wire or brush for the vines to climb on and pick the flowers every day. An application of bone dust and nitrate of soda will hasten the blooming time.


## LATE SPENCER OR SUMMER FLOWERING


#### Abstract

America Spencer. A very beautiful flaked variety. The ground color is ivory-white. Beautifully striped with brilliant


 crimson-red. Pkt., 10 c. ; oz., 35 c .; $1 / 4$ 1b., $\$ 1.15$.Asta Ohn. Soft pinkish-lavender self. Very large and wavy. Pkt., 10c.; oz., 35c.; 1/4 1b., \$1.15.

Blue Monarch. A splendid dark blue self of large size and good substance. Pkt., 10c.; oz., 35c.; 1/4 1b., \$1.15.

Countess Spencer. A lovely clear pink, shading deeper at the edges. Flowers of enormous size and very wavy. A strong vigorous grower bearing its giant flowers on long strong stems. Pkt., 10c.; oz., 35c.; 1/4 1b., \$1.15.

Commander Godsall. A welcome addition to the dark blue section. The color is an attractive shade of deep violet-blue. The flowers are large, of heavy substance, and attractively waved and fluted. They are produced abundantly in fours on long stems. Pkt., 15c.; oz., 50c.; 1/4 lb. \$1.75.

Daisybud. The color of the flowers is a harmonious combination of apple-blossom tints with a suggestion of cream-pink. The texture of the flowers is substantial but dainty. Extra large and beautifully waved. Pkt., 10c.; oz., 45c.; $1 / 4 \mathrm{lb}$., $\$ 1.35$.

Dobbie's Cream. The largest and best strain of "Primrose Spencer" flowers. Large, of splendid substance, magnificently waved. Color: Cream-yellow. Pkt., 10c.; oz., 35c.; 1/4 lb., \$1.15.

Hercules. A magnificent soft rose-pink self. The standard frequently measures two and one-half inches in diameter. Pkt., 10c.; oz., 40c.; $1 / 41 \mathrm{lb}$., \$1.25.

Illuminator. Rich salmony-orange overlaid with bright cerise-pink. The effect being a light orange-scarlet. Flowers of large size. Pkt., 10c.; oz., 35c.; 1/4 lb., \$1.15.

King Edward Spencer. A beautiful rich carmine-scarlet of largest size and beautifully waved. A strong, vigorous grower, bearing its flowers on long strong stems. Pkt., 10c.; oz., 35c.; $1 / 4 \mathrm{lb}$., $\$ 1.15$.

King White. Hailed as the King of Whites, because of the perfect finish of the flower in every detail, form, size, waviness and glistening immaculate whiteness. Pkt., 10c.; oz., 35c.; $1 / 4 \mathrm{lb}$., $\$ 1.15$.
Margaret Atlee. Standard bright rose color, wings white, slightly flushed with pink flowers of largest size and beautifully waved. Extra fine. Pkt., 10c.; oz., 35c.; 1/4 1b., \$1.15.

Mrs. Routzahn. Beautiful salmon-pink and cream ground. Color effect a rich apricot. Extra fine. Pkt., 10c.; oz., 35c.; $1 / 4 \mathrm{lb}$., $\$ 1.15$.

Othello Spencer. Rich, deep maroon. Pkt., 10c.; oz., 35c.; $1 / 4 \mathrm{lb}$., $\$ 1.15$.

Royal Purple. Rich, wavy, rosy-purple flowers of immense size. Pkt., 10c.; oz., 35c.; 1/4 lb., \$1.15.

The President. A glowing orange-scarlet, surpassing all in its class, its coloring equaling the oriental poppy. Flowers of largest size and beautifully waved. Extra fine. Pkt., 10c.; oz., 35c.; $1 / 4$ 1b., $\$ 1.15$.

Royal Scot. The flowers of Royal Scot are of heavy texture, beautifully waved and of large size. The color is a deep cerise, closely approaching a true scarlet. The plant is strong-growing and produces freely four-flowered stems. The lover of cerise shades will be delighted with this wonderful new variety. Pkt., 15 c .; oz., 60c.; $1 / 4 \mathrm{lb} ., \$ 2.00$.

Tangerine. This is the last word in orange-colored Sweet Peas. Deep orange, almost approaching the color of a tangerineorange. Flowers of great size, beautifully waved and well placed. Pkt., 10c.; oz., 40c.; 1/4 1b., \$1.35.

Wedgewood, Bright silvery-blue. A beautiful and popular color. Pkt., 10c.; oz., 35c.; 1/4 1b., \$1.15.

## SPENCER MIXED

Mingle's Superb Spencer Mixture. A combination blended by ourselves of the most beautiful and gigantic in size. This unsurpassed mixture includes all the best Spencer sorts. Great attention being given to secure a beautiful mixture and yet include all shades nicely balanced. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{~b}$., 75 c .; 1b., $\$ 2.50$.

## GRANDIFLORA SWEET PEAS

The grandiflora is the well-known type which has been grown for many years. The flowers are not quite as large as the Spencer sorts, but are easier grown and less expensive. We offer the best grandiflora sorts.

Blanche Ferry. Rose and white.
Captain of the Blues. Standard purple. Wings blue.
Dorothy Eckford. Large pure white.
Hon. Mrs. Kenyon. Primrose-yellow.
Janet Scott. Bright pink and buff.
King Edward. Bright crimson-scarlet.
Lady Grisel Hamilton. Silver-lavender.
Lord Nelson. Deep navy-blue.
Mingle's Grandiflora Mixture. A superb mixture containing only the finest grandiflora varieties blended with the greatest care so as to produce the best color effect. Pkt., 10c.; oz., 15c.; $1 / 4 \mathrm{lb} ., 40 \mathrm{c}$.; 1b., \$1.25.

## SWEET ROCKET <br> (Hesperis)

Favorite hardy perennials, very effective in the garden border. The plants form large clumps, two to three feet in height, covered with showy terminal spikes of flowers resembling stocks. The colors range from white through lilac to pink and purple, splendid for cut flowers.

Culture-Seeds may be sown outdoors in spring so that plants will bloom during late summer and fall, or started in early fall, plants will produce a profusion of blooms the following spring and summer.

Plants should have a light mulch of manure for protection during the winter.

Mixed Colors. Pkt., 10c.; 1/4 oz., 2Cc.

## THUNBERGIA

(Black Eyed Susan)
A very pretty, rapidly growing, tender climber, that is usually grown as an annual. Useful for hanging baskets, vases, trellises, window boxes, etc. Height, six feet.

Culture-Sow seed outdoors early in spring, no special care required.
Mixed. Flowers, white, orange, and buff shades. Pkt., 10c.; $1 / 4 \mathrm{oz}$., 30c.

## VERBENA

Few flowers are more deserving of a place in the garden than the Verbena. For beds, borders, mounds, vases, and window boxes they are particularly fine. May also be used for an undergrowth for tall plants. They produce large clusters of showy and often fragrant flowers in great profusion in constant succession from June until frost.

Culture - For early flowering plants should be started indoors; otherwise sow seed outdoors in April or May and thin out or transplant not closer than 18 inches apart, as the plants will cover the ground. Hardy annual.


## MAMMOTH VERBENAS

The trusses and individual flowers are of the largest size of brilliant colors, free blooming, and of vigorous habit.

White. Dense heads of finely
shaped pure white flowers.Pkt., 10c.; 1/4 oz. 50c.
Purple. Deep purple................. " " " " "
Defiance. Brightest scarlet........... " " " "
Blue ................................... . . . . " "، " "
Pink ..................................... " " " "
Mammoth Mixed. Flowers of large size in beautiful shades of white, scarlet, blue, purple, and rose. Pkt., 10c.; $1 / 4$ oz., 40 c.

## VINCA <br> (Madagascar Periwinkle)

Handsome free-flowering evergreen shrub with dark glossy, green foliage, and handsome flowers that bloom luxuriantly and most profusely all summer. Useful for bedding or borders, a fine cut flower, every bud opening when placed $n$ water.

Culture-It is best to start the seed early indoors or in a hot-bed, but they begin flowering, from seed sown outdoors, in May or as soon as the ground is warm, continuing until frost, or they may be potted in the fall and kept in bloom during the winter. Height, two feet.

Rosea Mixed. All the colors. Pkt., 10c.; $1 / 4 \mathrm{oz} ., 30 \mathrm{c}$.

## VIOLETS

(Sweet Scented)
Well known hardy perennial plants, much prized for spring blooming. Very fragrant and hardy doing best in a cool, moist location. Violet seed takes a long time to germinate.

Culture-Seeds may be sown outdoors early in spring so that plants will bloom during late summer and fall, or started in early fall, plants will produce a profusion of blooms the following spring and summer.

Plants should have a light mulch of manure for protection during winter.

Viola Odorata. Large dark blue. Pkt., 10c.

## WALLFLOWER

Wallflowers should be better known. Their adaptability for pot culture and outdoor bedding and the peculiar sweet fragrance of their flowers should win favor. The oriental coloring of the flowers in their rich reds and yellows is very effective. They are easily grown and last long as cut flowers. Half hardy perennial. Height, two feet.

Culture-Sow seed indoors February or March and pot when two inches high. Set outdoors May 15th, twelve inches apart. In September remove indoors and plants will bloom all winter. Will not winter outdoors in the northern states.
Cloth of Gold. Golden-yellow, large single flower-
ing. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Pkt., 10c.
Goliath. A splendid single variety; flowers of a
rich shining-red with a black-velvety sheen....
، 6
Single Mixed. All colors ............ .Pkt., 10c.; $1 / 4$ oz., 20c.
Double Finest Mixed . . . . . . . . . . . . . . . .Pkt., 10c.; $1 / 4 \mathrm{oz} ., 30 \mathrm{c}$.

## Wild Cucumber. See Echinocystis, page 45.

## WILD FLOWER GARDEN

A mixture of easily grown annual flowers which will furnish a profusion of blooms throughout the season, without the attention necessary for more formal plantings. This mixture will be found invaluable for the decoration of children's gardens, shrubberies along fences, and on embankments, and will convert many an unsightly spot into a place of beauty.

Culture-Sow seed broadcast in spring covering lightly with fine soil.

Mixture. Pkt., 10c.; oz., 25c.; $1 / 4 \mathrm{lb} ., 75 \mathrm{c}$.

## Woolflower. See Celosia Childsii, page 41.

## XERANTHEMUM (Everlasting or Immortelle)

This well-known hardy annual is one of the oldest and prettiest of the everlasting flowers and in winter bouquets retain their color and form for years.

Culture-Seed may be sown in the open ground early in May, growing readily in any open sunny position remaining in bloom from early summer till frost. Height about 3 feet.
Double Mixed
Pkt., 10c.; 1/4 oz., 30c.

## MINGLE'S ZINNIAS

## (Youth and Old Age)

The well-known bush-like plants of Zinnias produce a profusion of large double flowers borne on stiff stems. They are much used for bedding and are suitable for borders and for cutting.

There is much satisfaction in a bed of Zinnias with their twisted and recurved petalled flowers in many bright colors, and when nearly every other flower has been killed by frost this plant is still in full bloom. Few flowers are more easily grown or bloom more abundantly throughout the season, and the wide range of color is not less remarkable than their unusual depth and richness.

Culture-Sow the seed early in spring in open ground in good rich soil preferably in rows one and one-half feet apart and covering about one-fourth inch deep. When the young plants are one to two inches high thin to six inches apart. Half hardy annual, tall growing, usually about one and one-half to two feet high.

## GIANT MAMMOTH ZINNIAS

GIANT GOLDEN YELLOW. A lovely shade of yellow; perfectly double and always of the largest size. Pkt., 10c.; $1 / 8 \mathrm{oz} ., 30 \mathrm{c}$.

GIANT CRIMSON. This is the darkest shade of the Giant Zinnias. Rich crimson. Pkt., 10c.; 1/8 oz., 30c.

GIANT FLESH-PINK. Enormous flowers of this most attractive color. One of the finest light shades. Pkt., 10c.; $1 / 8 \mathrm{oz} ., \mathbf{3 0 c}$.

GIANT SCARLET. This is a rich shade of orange-scarlet. Always of largest size. Pkt., 10c.; $1 / 8$ oz., 30c.

GIANT WHITE. A magnificent pure white of largest size. Pkt., 10c.; $1 / 8$ oz., 30c.

GIANT ROSE. A beautiful shade of soft rose, large flowers of perfect shape in great profusion. Pkt., 10c.; $1 / 8 \mathbf{o z} ., 30 \mathrm{c}$.

GIANT SULPHUR YELLOW. Clear sulphur yellow flowers of good size. Pkt., 10c.; 1/8oz., 30c.

GIANT DOUBLE LAVENDER. A new and pleasing shade of light lavender. A rich and impressive color that takes well. Pkt., 10c.; $1 / 8 \mathrm{oz} ., 30 \mathrm{c}$.

GIANT MAMMOTH MIXED. Our strain of this magnificent large-flowered type is unsurpassed. The blooms are of immense size when well grown, averaging $31 / 2$ to $4 \frac{1}{2}$ inches in diameter and often 3 to 4 inches in depth. In addition to the usual colors there will be found many other fine and rare shades. Pkt., 10c.; $1 / 4$ oz., 40c.; oz., $\$ 1.25$.

## CURLED AND CRESTED

The petals are elegantly twisted and curled, giving the flower a most attractive, crested-like appearance. The plant grows 18 inches high by 2 to $21 / 2$ feet in diameter and blooms freely until killed by severe frost. The colors range from white through many shades of yellow, rose-pink, and salmon to deepest crimson. Curled and Crested is a wonderful cut-flower which will last considerable time in water. This new Zinnia has become very popular within a few years and has always attracted attention. Mixed, all colors, Pkt., 10c.; 1/4 oz., 25c.

## NEW CACTUS FLOWERED ZINNIAS

Distinct in form from all Zinnias, as the petals are so quilled that they become almost tubular. They are straight, radiating from the center of the flowers, which thus greatly resemble a fine-petaled cactus Dahlia. As the back of the petals are of a distinct color and as they incurve to form the tube, it gives the flower a bi-colored appearance. The colors range through varying shades of yellow, orange, pink, and rose to scarlet and crimson. The flowers are borne in great abundance; on well-grown plants they will average 4 to 5 inches in diameter. Pkt., 20 c.

## PICOTEE GIANT DOUBLE

This variety is one of a remarkable new and distinct class of Zinnias, producing double flowers, measuring from 4 to 6 inches in diameter, in the following colors: orange, yellow, flesh and pink, each petal being tipped with a dark chocolate or maroon shade, giving the flowers a very pleasing appearance, resembling a Picotee Carnation. Giant Double Picotee is very desirable for bedding or for cutting. Pkt., 25c.

GOLDEN PHEASANT. A variety of the above having flowers of a deep orange with maroon tips. Pkt., 25c.


## NEW DAHLIA-FLOWERED

This new strain of Zinnia is the result of many years of selection and hybridizing. The flowers are of very large size, their shape closely resembling the Decorative Dahlias and include a complete range of bright and rich colors. In this new type the flower-petals stand well apart. This characteristic adds to the texture of the flowers and lends a graceful and airy appearance. The plants are tall and produce their flowers freely. The flowering season lasts from July until frost.

BUTTERCUP. An immense deep creamy yellow. A very desirable flower, which should be included in every collection. Pkt., 25c.

CRIMSON MONARCH. By far the largest and best of the red shades. Flowers often eight inches in diameter. Plants very vigorous. A marvelous production of extraordinary merit. Pkt., 25c.

EXQUISITE. By far the most pleasing of our collection. Truly DAHLIA flowered as regards form and size. Color light rose with center a deep rose. (Tyrian Rose.) Pkt., 25c.

ORIOLE. We consider this the most beautiful of its class. It is an immense orange and gold bicolor, changing slightly as it ages, but at all times worthy of the beautiful bird for which it is named. Pkt., 25c.

POLAR BEAR. A very large pure white, the best white yet seen in Zinnias. True Dahlia form. Pkt., 25c.

Mixture of the above five varieties, all colors. Pkt., 20c.

## LARGE FLOWERING CANNAS



The CANNA has long been one of the most popular of bedding plants. The old varieties had very small flowers and were planted simply for the effect of the beautiful foliage.
The new varieties are doubly attractive as they have not only the same beauty of foliage but also immense flowers of the most striking colors. If you have never grown any of these new orchid flowered Cannas you will be wonderfully surprised at their beauty.

Cannas do well in almost any kind of soil, but they well repay liberal treatment. For the best results they should be planted in good loam that has been well mixed with an abundant supply of well-rotted stable or other manure. The beds should be spaded 2 feet deep, or more, and the soil well pulverized. Water should be applied abundantly at all times, but good drainage is essential.

Cannas are most effective when planted in masses, either alone or in combination with salvia (scarlet sage) and bordered with coleus or other dwarf-growing bedding plants. They are also frequently used with some of the tall-growing ornamental grasses, with which striking combinations can often be secured. They do best in sunny situations, and should be set out about two feet apart each way. The bulbs should not be planted outdoors until the soil is thoroughly warm, as they will rot in cold soil.

## All of the following are Dormant Roots

## GREEN-FOLIAGED CANNAS

Pink
CITY OF PORTLAND-A wonderful bright rosy-pink, much deeper in color than Mrs. Alfred Conard or Hungaria, a freeflowering vigorous grower; $31 / 2$ feet. Ea., 20c.; doz., $\$ 2.00$.

MRS. ALFRED CONARD-One of the very best Cannas in commerce today. The large exquisitely shaded-salmon pink flowers are produced in great abundance on robust upright stalks; 4 feet. Ea., 20c.; doz., \$2.00.

MORNING GLOW.-A color contrast of more than usual picturesqueness; foliage an olive green striped, and veined with bronze. Flowers exquisite, soft shell pink with orange-red center; 31/2 feet. Ea., 20c.; doz., \$2.00.

ROSEA GIGANTEA-Rich soft rose-pink flowers of gigantic size; a prolific bloomer. The large broad petals and the massive heads of bloom invariably create a sensation; $31 / 2$ feet. Ea., 20c.; doz., \$2.00.

## Red

METEOR-Magnificent bedding variety with massive erect trusses of deep blood-red flowers, produced with a freedom that leaves nothing to be desired. The best deep red large-flowered Canna; 5 feet. Ea., 20c.; doz., $\$ \mathbf{2 . 0 0}$.

THE PRESIDENT-When the Canna Firebird was introduced its immense florets and bright red color insured its immediate popularity. In offering the President we may best describe it as possessing all the good qualities of Firebird, enhanced by extraordinary vigor and perfect healthy foliages. It grows to a height of 5 feet, and produces its immense trusses of giant florets in great profusion. The most sensational introduction of recent years. Ea., 20c.; doz., $\$ 2.00$.

WINTZER'S COLOSSAL-Without a doubt the largestflowered Canna yet produced. Flowers of vivid scarlet, sometimes measuring eight inches across; 5 feet. Ea., 15c.; doz., \$1.50.

## Yellow

GOLDEN EAGLE-A grand clear golden-yellow, of free upright growth. The flowers are produced in large clusters well above the foliage; 4 feet. Ea., 20c.; doz., $\$ 2.00$.

YELLOW KING HUMBERT-Like King Humbert in habit of growth and flowering, and produces golden-yellow flowers, blotched red; 4 feet. Ea., 15c.; doz., \$1.50.

## White

EUREKA-Our own introduction and the best white Canna for all purposes. The large substantial flowers are very freely produced on strong, vigorous plants; $41 / 2$ feet. Ea., 20c.; doz., \$2.00.

FLAG OF TRUCE-A large-flowered, creamy-white with faint pink dots on each petal. The general effect is white. Not as white nor as tall as Eureka, but quite distinct and valuable; 4 feet. Ea., 20c.; doz., \$2.00.

## BRONZE-FOLIAGED CANNAS

## Red

KING HUMBERT-The most popular Canna. Great orangescarlet flowers surmount the vigorous dark bronze foliage throughout the season; 5 feet. Ea., 15c.; doz., $\$ 1.50$.

WYOMING-A splendid bedder, with bright orange flowers, on 6 -foot massive purplish-bronze foliage, making a strong contrast. Ea., 15c.; doz., \$1.50.

## Pink

SHENANDOAH-Flowers salmori-pink borne in large clusters, foliage rich ruby-red; 4 feet. Ea., 20c.; doz., $\$ 2.00$.

## Yellow

SAN DIEGO-Chinese-orange or Persian yellow. Thecrimped petals are remarkable for substance, which enables them to withstand the hot summer sun without wilting. Another charm is the dark bronze color of the buds, which harmonize with the rich bronze foliage; 4 feet. Ea., 20c.; doz., \$2.00.

## DAHLIAS

Dahlias will grow in almost any kind of soil, but it should not be too rich. The soil should be plowed or spaded deeply as early as possible and then again just before planting. If it is already fertile, use no manure or fertilizer. If it is poor, broadcast any kind of manure before the first spading. If manure is not obtainable, use some good fertilizer, not too rich in Ammonia or Nitrogen. Apply this at the rate of one-half ton to the acre.

There is a good deal of difference in opinion as to the proper time to plant. Formerly everybody planted dahlias as early as possible. Lately many authorities recommend planting as late as July 1st. It is often difficult, however, to keep the roots in good condition so late. Plant the roots four to six inches deep and two to four feet apart. Allow but one stalk to the root; cut the others off. If you wish, you can make new plants from these sprouts, as they root in soil very readily.

The soil around the roots of dahlias should never be allowed to crust. Cultivate deeply until the buds begin to open. After this, one to two inches. By this method plants may be successfully carried through very dry summers.

The roots should be stored in cool cellars away from furnace heat.

## Our exhibition of Dahlias during September and October attract much favorable attention, at which time many buyers make their selection.



Hybrid Cactus Dahlia "Attraction"

## Cactus Dahlias

ATTRACTION. A beautiful dahlia that is greatly admired. The flowers, which measure fully six inches in diameter, are composed of gracefully arranged curled or twisted petals of a lively, yet soft silvery mauve-rose, with white suffusion. Each, 75c.

BETTY AUSTIN-A lovely variety that is in a class by itself. Color yellow at base of petal, blending to rosy carmine and rose, yellow at tips; reflex rose. A combination at once pleasing and effective. The flowers are of good size and splendid form, borne erect to facing on long stiff, slender stems, well above the foliage. An early, free and continuous bloomer. The plant is dwarf, 3 to 4 ft . high, of branching habit. A wonderful commercial cut flower and an ideal garden plant. It is entirely distinct and will find its way into every collection. Each, $\$ 1.00$.

BIANCA. A magnificent new hybrid cactus that is in a class by itself, of giant size and splendid form. The color is white, suffused and overlaid an exquisite soft mauve-pink. A strong vigorous grower of splendid habits and a very free bloomer. The gigantic flowers are facing and held erect on long stiff stems. Each, \$1.00.

CLAIRE KULP (Hybrid Cactus)-A cross of Kalif and Mrs. C. H. Breck. An entirely distinct acquisition having the size of Kalif on a rigid, upright, but slender stem. Color: rich cardinal red, shaded garnet, yellow at base and at tip of petals. Plant is strong, vigorous, 5 to 6 feet high and a free and continuous bloomer. The first flowers are solid red, midseason like above and late, for it blooms until frost, show more yellow at base and tip of petal. Each, $\$ 2.00$.

COUNTESS OF LONSDALE. Salmon tinted apricot. The flowers are large and double of perfect form. A free bloomer. Each, 25 c.

CRYSTAL. One of the very finest, clear soft pink cactus. Flowers are of large size with long narrow incurved petals and full centers. A strong vigorous grower and profuse bloomer. An excellent variety for exhibition and garden. Each, 50c.

DUCHESS OF MARLBORO. A magnificent cactus, most pleasing and effective; rich golden orange, overlaid solferino. The flowers are of splendid form with long, narrow twisted incurved petals; large size and produced freely on long graceful stems. Each, 50c.

EDITH CARTER. A soft bright yellow, suffused and heavily tipped bright rosy-carmine. Of fine form, good size and produced freely on long stiff stems. An unusually lovely variety. The plant is an early, free and continuous bloomer. Each, 50c.

ETENDARD DE LYON. Everyone stops to admire this beautiful carmine-rose giant, which we consider one of the finest varieties for garden decoration. The flowers are distinct in shape from all others; the petals are broad, curled and wavy, and form a flower fully six inches in diameter and four inches deep, a very large flower, yet without any stiffness or formality; its color is a rich carmine-rose, or Royal-purple, with a brilliant suffusion difficult to describe. Each, 75c.
F. W. FELLOWS. Flowers of immense size. Composed of numerous long narrow incurved petals of a lively orange-scarlet. This is one of the largest and finest autumn shade varieties. Should be in every collection. Each, 50c.

FRANCES WHITE. Pure white, shading to sulphur-white at centre. One of the finest white cactus dahlias grown. Each, 25c.

GENERAL BULLER. Very bold and striking. Rich velvety maroon, shading to crimson, tipped white; a profuse bloomer on stiff stems, well above the foliage. Each, 25 c.

GEORGE WALTERS. Not only one of the very best autumn shade varieties, but one of the best in existence. The flowers are of immense size with rather broad, heavy petals of great substance and good keeping qualities. The plant is a strong vigorous grower, producing the flowers on long stiff stems, making it fine for cut flowers and exhibition, as well as one of the best garden varieties. The color is a rich coppery old gold shading to buff at the center. Should be in every collection. Each, 75c.

GOLDEN EAGLE. Very large, bright yellow suffused rose fawn. The petals are long, narrow and pointed. Produced on extremely long graceful stems. A profuse bloomer. Each, 35c.

GOLDEN WEST. This is a California variety that is in a class by itself, in its color-the rich golden, bronzy-yellow, with the scarlet shading at the base of the petals and the center. It is a wonderful grower, strong and sturdy, with heavy, clean, healthy leaves, and branching habit, producing the large flowers freely on long stiff stems. The flower is large, six to eight inches across, the outer petals reflexing somewhat, and a full high center, making it very deep. It is the greatest seller as a cut flower, a winner for exhibition, and a wonder as a garden plant. Should be in every collection. Each, 50c.

## Cactus Dahlias--Continued

J. H. JACKSON. Still one of the best and most reliable of the so-called black dahlias; rich velvety maroon, with white tip, the darkest one known. A fine large flower and a free bloomer. Each, 35c.

KALIF. A truly majestic flower, frequently measuring over nine inches in diameter, of perfect cactus form, in color a pure scarlet. The habit of the plant is all that can be desired, growing with us about $41 / 2$ feet high; the gigantic flowers, which are produced very freely, are held erect on strong stiff stems, making it a most effective and useful variety for cutting as well as for garden decoration. Each, 75c.

KATHRYN DONGES. Hybrid Cactus. The greatest of all yellows. The size is immense. 9 to 10 inches and deep with a full high center, always full in marked contrasts to Yellow King, which it resembles only in form, being more than twice the size and such stems 2 to 5 feet long and as straight and erect as an Indian spear. Wherever shown it has been acknowledged the greatest yellow cactus in existence. The plant is 5 to 6 feet high and branching a truly colossal dahlia, beautiful form and soft color, with the numerous long narrow petals, that there is no heaviness. Stock limited, while it lasts. Each, \$2.50.

LAWINE. A magnificent flower on long stems. A large white, lightly suffused pink. A strong vigorous grower, early and profuse bloomer. One of the best for commercial cut flowers and for the garden. Each, 25c.

LUMESCH. A cross of Mme. A. Lumiere and Mme. Eschenauer. A most beautiful and distinct variety of hybrid cactus form. The color is white suffused pink, heavily shaded carmine. A popular color combination, that is pleasing and effective. An early and free bloomer. Each, 75c.

LIBELLA. A beautiful purple, one that you will appreciate. Each, 25c.

MARJORIE CASTLETON. The best standard pink cactus dahlia. It is much softer than most of the pinks, and is an early, continuous bloomer. The color is soft rosy pink, tinting lighter toward the centre. It is a very rapid grower, with good stems and keeps well after cutting. Each, 25c.

MARGUERITE BOUCHON. Magnificent shade of brilliant, yet soft rose, with very large white centre, and distinctly defined white tips. Each, 75c.

MRS. EDNA SPENCER. A giant of the true cactus type, greatly recommended for its keeping qualities as a cut flower. Flowers held erect on the best of stems. Color pale lilac, shading lighter at centre. Each, 75c.

MRS. LEO NIESSEN. Hybrid Cactus. One of the very best commercial cut flowers. It is one of our Florida creations, that we have held and grown exclusively for cut flowers up to the present time. Mrs. Niessen selected the variety to be honored with her name, late in the Season, when so many varieties were coming open centered. The plants were then broad and completely covered with long stiff stemmed, perfectly full flowers, of the most gorgeous Autumn shades. Color, yellow at base, suffused and heavily tipped a rich bronzy red. It is one of our very best cut flower sellers and a wonderful garden plant. Each, \$1.00.

MRS. SEAL. A very striking cactus that is greatly admired by many. The flowers are large, deep maroon, tipped light rose and white. The colors are so harmoniously blended and it is such a profuse bloomer that it will be a valuable acquisition to those that like variegated or multi-colored flowers. Each, 35c.

MME. HENRI CAYEUX. A reliable exhibition variety. The flowers are of the largest size with long, narrow florets, forming a bloom of magnificent form. The color is a beautiful rich pink, daintily tipped white. We highly recommend this variety as one of the best. Each, 50c.

MRS. WARNAAR. One of the best of the Holland productions. Of mammoth size, fine form and substance. Color, creamy-white with apple blossom suffusion. An acquisition. Each, \$1.00

NIBELUNGENHORT. Immense flowers 7 to 8 inches across, rich golden apricot, suffused old rose. The plant is also a giant, being very strong and vigorous, producing the massive flowers early and freely on very long stiff stems. It is entirely distinct, does well everywhere and should be in every garden collection. It is a fine exhibition variety. Each, 50c.


Cactus Dahlia "Marjorie Castleton"
PIERROT. Immense size with very long incurved petals; deep amber, distinctly tipped white, sometimes solid amber. A magnificent exhibition and garden variety. It is a very strong, vigorous grower, producing the giant flowers profusely on very long slender graceful stems. Each, 50c.

PINK PEARL. Deep hollyhock-pink, gradually shading to white at the tip of the petals, the effect being a soft rosy-pink; flowers of medium size and good form. Each, 25c.

QUEEN OF HEARTS. A beautiful white. Large flowers, free bloomer. Each, 25c.

REINE GAYEUX. Rich glowing cardinal red. An early and extremely profuse bloomer, with good stems. A grand garden and cut flower variety. Each, 35c.

RUBE GIRL. A remarkable bronzy or "Autumn shade" variety that has forged to the front as a garden plant, and is especially valuable as a commercial cut flower. Color soft yellow, suffused, overlaid and tipped coral red, giving the flower a bronzy effect, that lights up wonderfully under artificial light. The plant is semi-dwarf ( 4 feet), of branching habit, and an early and extremely free bloomer, producing the always perfect flowers facing on long, slender stiff stems. Each, 50c.

RUTH GLEADELL. Lemon yellow, shading to buff, suffused and tipped pale lilac rose. Each, 50c.
SEQUOIA. Deep saffron-yellow, suffused with red. A free bloomer and will give entire satisfaction. Each, 25c.

VERNA FOWLER. Light yellow, penciled and tipped pink and carmine. The plant is a very vigorous grower, 5 feet high and producing the flowers freely on long graceful stiff stems. Bright and effective. Each, $\$ \mathbf{1 . 0 0}$.

WODAN. Old gold at centre, shading to salmon-rose. This variety is in a class by itself, in-so-far as it is an extremely vigorous, almost rampant, grower, producing the big flowers profusely on very long stems. One of the best. Each, 50c.

YELLOW KING. One of the largest of all cactus dahlias, being of gigantic size and of the finest new cactus. Color light yellow, tinting to cream at the tips, giving it a most pleasing effect. The immense flowers are borne on long stiff but slender stems. The plant is a strong and sturdy grower and a free and continuous bloomer under all conditions, making it one of the most reliable for all purposes. Should be in every collection. Each, 35c.

## Paeony Flowered Dahlias



## Paeony Dahlia

QUEEN ELIZABETH. This new Paeony Dahlia is the highest type yet produced in the class. The color is a beautiful rosy mauve. The large flowers are facing, on very long ( $21 / 4$ to 4 feet) stems, slender, yet stiff, holding the flowers erect. The plant is a very clean, strong grower and free bloomer, every shoot produces a flower. It is a variety that just will bloom. A flower that should be in every collection. Valuable for cutting, exhibition and the garden.

The demand for Queen Elizabeth has exceeded our expectations. It seems to do well all over the country, and unlike most dahlias, it improves as the season advances. The color improves, they keep longer and are at their best just before frost. Each, 35c.

GANADA. One of if not the largest of all white Pæony Dahlias. The flowers are massive, with heavy petals, and are held erect on long stiff stems. An early, free and continuous bloomer. The plant is strong, vigorous and healthy, exceptionally fine for cutting, exhibition or garden. Each, $\$ \mathbf{1 . 0 0}$.

DIEMONT VON BYSTEIN. Large white suffused and shaded blue lilac. Very fine form and a free bloomer. Each, 35c.
F. R. AUSTIN. One of the most striking and valuable Pæony Dahlias in existence. The beautifully colored flowers are of large size, averaging 6 to 8 inches across. Color, the outer petals are very long, creamy yellow, suffused, banded and shaded rich crimson; the inner petals are yellow at base, tinting lighter and suffused pink and crimson. The plant is a strong, vigorous grower, an extremely early and free bloomer, and continues to bloom the entire season, making it most valuable for garden and exhibition. Each, 35c.

GEISHA. The most striking color combination, golden yellow, changing to bright scarlet at the center of petal and back to gold at the tip. Giant flowers on long wiry stems. Each, $\$ 1.00$.

HAMPTON COURT. Hydrangea pink. A large handsome flower. Each, 35c.

MRS. HOWARD M. EARL. An exquisitely lovely pæony, light yellow, suffused and overlaid carmine scarlet, tipped yellow. A refined and glorified Geisha. Plant is very strong, producing the flowers on long graceful stems. Owing to the great demand, stock is very limited. Each, 75c.

## Century Dahlias

AUTUMN CENTURY. A fine bronzy variety; large fine form on long stems. Color, buff yellow at base of petals shading through amber to red, with an iridescent sheen. Each, 35c.
BARTON. Rich vivid crimson, large size, finest regular form and a profuse bloomer on long stems. Each, 50c.

GIANT CENTURY. Immense size, finest form and beautiful color combination. Color is yellow at base, shading to bronzy salmon and crimson, with lighter tips. Undoubtedly
the largest single Dahlia in existence, producing the giant blooms 7 to 10 inches across. Each, 50c.

GLORIA. Rich yellow, tipped and penciled vivid red; flowers of great substance, on long rigid stems. Very bright and effective. Each, 25c.

GLOXINIA. In marking and brilliancy of color, resembles the Gloxinia so much as to suggest the name. Color, brilliant cerise, tinting lighter at tips, with white at base of petal, making a white zone around the yellow disc. Each, 50c.

MRS. JOSEPH LUCAS. A combination of Autumn shades. Immense size, beautiful form, produced profusely on good stiff stems. Yellow suffused orange and overlaid salmon pink. One of the largest and handsomest. Each, 35c.

ROSE PINK CENTURY. The largest and best deep pink enormous flowers on long three feet stems; a sure and continuous bloomer, vigorous plant. Each, 25c.
20th CENTURY. The original century, originated and introduced by Peacock in 1901. Early in the season color an intense rosy crimson, shading to white at tips, and base of petals; but as the season advances the flower opens lighter until, by October, they are nearly white, a bright pink blotch in the center of the petals. Each, 25c.

## Decorative Dahlias

ALASKA. One of the very finest white decorative dahlias. Flowers of large size, finest form and borne erect on rigid stems. Exhibition or cut flower. Each, 50c.
ALBERT MANDA. Very large, white, suffused primrose and rose. Each 35c.
BERCH von HEEMSTEEDE. Pure yellow, suffused a golden bronze; petals beautifully twisted and whorled, large and fine. Each, 50c.
BREAK O'DAY. A new giant flowered Dahlia that should be in every collection. Its immense size is relieved by a beautiful irregular formation and its soft color. A delicate clear sulphur yellow, tinting to sulphur white at the tips. The petals are of great substance, illuminated by a satiny sheen, giving the flowers a waxy appearance. A strong vigorous grower and free bloomer, with long erect stems. An acquisition. Each, 50c.

BREEZE LAWN. Dazzling vermilion, of immense size, perfect form, and full center. Early and profuse bloomer. Each, 75c.

CHIEFTAIN. Clear light red, heavily streaked and splashed canary yellow; some flowers all red; very large and attractive. Each, 75c.

CHALLENGE. A very striking new decorative. Flowers large, yellow at the base, shading to bronzy red, tipped rich velvety oriental red. A fine grower and a good bloomer. Each, 75c.

COPPER. The largest and one of the very best. Often ten inches across. A beautiful copper color shading to bronze and apricot. Has long stems and is a free bloomer. Each, 75c.

CROWN OF GOLD. Very popular as a cut flower; color a Chinese orange with golden suffusion. Each, 25c.

CUBAN GIANT. Dark velvety crimson, large. Stems long and wiry. Plants are very tall and sturdy. Each, 50 c.

DELICE. One of the most popular pink varieties. Its beautiful soft, yet lively color, a glowing rose-pink, together with its perfect shape, stout, stiff stems, and the fact that when cut it retains its freshness for a long time, makes this one of the most valuable for cutting or decorative sorts in the garden. Each, 35c.
D. M. MOORE. In this offering we have one of the best "nearly black" varieties to date. It is a rich, deep, velvety Victoria-lake, which is a shade deeper than deep maroon, the nearest approach to black to our knowledge. A mammoth flower produced in profusion on long, stiff stems. Each, 50c.

FANTASIE. A new acquisition that promises to become a universal favorite. The flowers are very large, exquisite form and coloring. The color is entirely new and distinct, being salmon shaded blue. It is a very profuse bloomer. Each, \$1.00.

## Decorative Dahlias-Continued

FIREBURST. This gigantic dahlia is a seedling from the well-known French variety, Le Colosse. The flower is more flatly built, has broader and longer petals, and is a far more intense scarlet, slightly shaded orange-red. This is a variety of great value, producing specimens which measure eight inches and over in diameter. The finest scarlet colossal dahlia. Each, 50c.

HARMONY. Color very similar to Wodan; mauve rose with golden suffusion, good form and habit of growth. Each, 25c.

HOCHSAI. Russet orange shading amber at tips, and brightened with a golden sheen. Flowers of fine form and size, on good stems. Each, 35c.

HORTULANUS FIET. One of the loveliest Dahlias that ever came from Holland. The color is a creamy-salmon, shading to soft yellow. The flowers are large, and the formation and stems are both excellent. Free flowering. Each, \$1.00.

INSULINDE. The finest and most artistic dahlia of distinct form with petals twisted and curled. Stems are two to three feet long, and flowers nine to ten inches across. Color a rich saffron yellow shaded russet orange. One of, if not the grandest of Holland's introductions. Each, $\$ 1.50$.

ISABEL STREET. A grand new variety that has attracted the greatest attention of visitors at our farms and wherever exhibited. The flowers are large, extremely full to the center while the outer petals reflex to the stem. Color at base bright yellow shading to bright rose red, with white tips; reflex pale pink. The flowers are of heavy texture and borne facing on long cane stiff stems. The plant is strong, vigorous, of upright branching habit, 5 to 6 ft . high, producing the big long stem, blooms freely and continuously. A wonderful exhibition and commercial variety that should be in every collection. An acquisition to every garden. Each, $\$ \mathbf{2 . 0 0}$.

JACK ROSE. Brilliant crimson-red, similar in shade to the popular "Jack Rose," which suggested its name; perfect for garden decoration or for cutting. Each, 15c.

JOHN WANAMAKER. One of the loveliest formed; no two petals or flowers just alike. Color: soft orchid pink. An extremely early and profuse bloomer. Should be disbudded to give large long stem flowers. Each, 50c.

JONKHEER BOREEL. Soft yellow, shading to golden amber. Large, splendid form on long stiff stems. Exhibition and cut flowers. Each, 75c.

KING ALBERT. In this we have a magnificently royal flower. Large, finely formed, rich royal purple. It is a strong vigorous grower and free bloomer. Each, \$1.00.

LE GRAND MANITOU. Immense size; lilac penciled crimson, extra fine; dwarf. Each, 50c.
L. KRAMER PEACOCK. The ideal white decorative for garden or cutting. The flowers are large, of perfect form, pure white and of great substance, keeping a long time after being cut. The plant is a strong vigorous grower of dwarf branching habit, a quick, free grower and profuse bloomer. Each, 35c.

MEDUSA. One of the largest Dahlias grown, and an entirely new type. The long pointed bud is held erect on the cane stiff stem, and as the flower expands, the long narrow petals unfold with an individual twist. Color, a luminous rose red, tinting lighter at tips of outer petals. As the flower develops the long, twisted outer petals reflex downward, in a most novel and pleasing manner. Size, 8 to 10 inches with petals extended. Each, 75 c .

MILLIONAIRE. Most delicate lavender with faint pink cast overshading it, the whole having a blending of white. One of the best known lavender pink dahlias, an immense flower that attracts considerable attention on the exhibition table. Plants are very dwarf, so it is not recommended as a cut-flower variety. Flowers from six to nine inches in diameter. Recommended for exhibition purposes. Each, \$1.00.

MONT BLANC. An early, free, continuous flowering, creamy-white on good stiff stems. A most important cut flower variety. Each, 25c.

MARY SWAIN. Very distinct and striking. Color varies from white flushed pink at center to rich maroon at tips. The plant is dwarf, and an extremely profuse bloomer. Each, 50 c .

MINNIE McCULLOUGH. One of the most popular artflower varieties now grown; particularly valuable for use under artificial light. Color, soft yellow, overlaid with bronze; a beautiful autumnal tint. Each, 25c.


Decorative Dahlia "Mina Burgle"
MINA BURGLE. This is one of the finest dark red dahlias yet introduced. Flowers often measure eight inches across. A perfect beauty. Each, 35c.

MRS. C. H. BRECK. Cream-colored centre, shading to soft red. Ends of petals dark red. Flowers large. We highly recommend this flower for the garden. Has long stems and is a free bloomer. Each, 50c.

MRS. J. GARDNER CASSATT. A large flowered mauve-pink of a shade that is very pleasing; a fine cut flower. Each, 25c.

MRS. J. HARRISON DICK. One of the most valuable varieties of recent production. Color citron yellow at centre, outer petals suffused and overlaid salmon pink, a lovely and effective combination, especially under artificial light. The plant is a wonderful grower of medium height, and branching habit, producing the perfect flowers in greatest profusion on long stiff stems. The flowers are medium to large 5 to 7 inches in diameter and are held in facing on the cane stiff stems. Valuable for exhibition, cutting and the garden. Each, 50c.

OCTOBER. (Decorative.) Autumn yellow suffused and tipped red. A splendid "Autumn shade" variety, that remains perfectly full to the centre until killed by frost in November, the large flowers are produced freely, and held facing on the long stiff stems. Each, 75c.

OREGON BEAUTY: Intense Oriental-red with golden sheen and garnet suffusion, makes it one of the varieties that stands out prominently a mong all of its neighbors. Add to this large size, long stiff stems, with an unusual freedom of bloom, makes it one of the most desirable garden varieties. Each, 35c.

PATRICK O'MARA. This sensational new decorative variety was awarded a Gold Medal by the American Dahlia Society, as the best Autumn shade variety in existence. The color is an unusually soft and pleasing shade of orange-buff, slightly tinged with Neyron rose. It is very large, 7 to 9 inches in diameter, and borne on long strong erect stems. It is a strong vigorous grower and a free bloomer. The giant flowers are well formed, with good full center, while the outer petals are most pleasingly irregular. Each, $\$ \mathbf{1 . 0 0}$.

PINK FLAMINGO. A dahlia of fine form, sometimes showing an open centre. Color violet rose overlaid. Tyrian rose; very free flowering and early. Each, 35c.

PRINGESS JULIANA. An ideal pure white for all purposes. A splendid cut flower and a good decorator for the garden. It is one of the earliest to flower, and continues in good shape throughout the season. It holds its flowers well above the foliage on stiff, wiry stems. Each, 25c.

PROFESSOR MANSFIELD. A remarkably large variegated dahlia. Flowers are of sparkling yellow, with clear white tips. A tinge of rosy-red is noticeable toward the centre. A free bloomer. Each, 25c.


Decorative Dahlia "Queen Mary"
QUEEN MARY. A grand decorative that has proven its worth as the best deep pink for all purposes. The size is large to very large, full high center, even up to November, when killed by frost. Color, clear silvery cerise pink. The plant is a strong, healthy, vigorous, upright branching grower, producing the giant flowers freely on long stiff stems. (See illustration.) Each, 35c.

RUTH ROLAND. Large, well-formed, decorative; color sulphur yellow, tipped and suffused mauve rose; of good size and growth. Each, 75c.

SHEBA. A remarkably charming and effective variety that is sure to become a universal favorite. Color, petal tips white, broad band of white along midvein toward base, both edges cardinal-darkest on opening petals at center. Form: Fluffy, loose, artistic, stylish. Size: 5 to 6 inches, with beautiful, full, pointed center. Petals recurved, twisted and whorled; some half spiral edges, some inrolled trowel like; other edges rolled back. Tips acuminate, none cleft. Some petals project forward giving depth. Petal line effect wavy and sinuous. Blooms facing on perfect stem well above foliage. Each, \$1.00.

SEBASTOPOL. A Burbank creation that has never been equaled in its class and color. Rich golden scarlet, always full to the center. Each, 25c.

SOUVENIR DE GUSTAV DOAZON. Of mammoth proportions, which, under ordinary cultivation, will produce flowers six inches across, and can be grown to measure full nine inches. It is of free growth and pure red in color. Each, 25c.

SULPHURIA. Wonderful form with long petals throwing back like a Japanese chrysanthemum. Very large and free flowering. Also an early bloomer. Each, 75c.

SYLVIA. Soft, pleasing mauve-pink, gradually turning to white in the centre. A fine cut flower. Each, 25c.

YELLOW DUKE. Large flowers and plenty of them. Very attractive. Each, 25c.

## Show Dahlias



Show Dahlia

ARABELLA. Light sulphur yellow, shaded peach blossoms on edges, a fine flower. Each, 35 c.
A. D. LIVONI. Clear cerise pink, quilled petals. A free bloomer and a great favorite. Each, 25c.

DREER'S WHITE. An excellent Dahlia for garden effect and hedges; plants are very strong and vigorous, making ideal bushy specimens, averaging 3 feet in height. Color, a pure, glistening white; in form it resembles the popular "Grand Duke Alexis," while in freedom of flowering it is not surpassed by any. Unquestionably the most valuable snow-white variety in existence. Each, 35 c.

EMILY. Delicate lavender, over-spread with white. The daintily blended colors make this an exceptionally beautiful dahlia. Long, stiff stems. Each, 15c.

PENELOPE. Small ball, white flaked, rosy lake, always in bloom. Each, 25 c.

VIVIAN. A great favorite which received the admiration of everyone who saw its wonderful flowers, the color being white, effectively edged rose-violet. An extremely wonderful blending of color possessed only by the rare novelties. One of our champions and a variety worthy of the highest words of praise. Each, 25c.

WHITE SWAN. Pure white, the standard commercial white Ball Dahlia. A strong grower and free bloomer. Each, 25c.
W. W. RAWSON. The popularity which this novelty has acquired speaks for itself for the superior quality of this flower. The petals toward the centre are quilled similar to the "Grand Duke Alexis;'" toward the outer part they are more open and flat. The color is pure white overlaid with amethyst-blue. This wonderful combination gives it the appearance of delicate lavender. The flowers measure from 7 to 9 inches in diameter. Each, 50c.

## Collarette Dahlias

MAURICE REVOIR. Ox-blood red with deeper shading in the center of petals and a pure white fringed collar. Each, 25c.

Only the best and strongest root-divisions are used in filling orders, and while we exercise every care, errors may occur occasionally. In such case, kindly notify us at once, and correction will be promptly and cheerfully made.

We guarantee every plant, bulb or root sent out by us to be just as represented, absolutely true to name, reach destination safely, in perfect condition and prove entirely satisfactory; we will cheerfully replace any that should prove otherwise.

Address all orders or communications to: P. B. MINGLE CO., 103 Market St., Philadelphia, Pa.

## GLADIOLI



Gladioli. Of recent years the interest in Galdioli has been tremendous and whereas only a few dozen were planted, thousands of bulbs are used annually. Wonderful improvements by the American hybridizers have produced some of the very best Gladioli, being noted for their strong, free growth, free flowering qualities, purity of color and their ability to produce satisfactory results under the most ordinary conditions.

As a garden flower it is useless to compare them with other flowers, because they are so unlike, so individual and the qualities so peculiarly their own. For cutting purposes there is not a flower to compare with them. Beautiful as it is in the garden, it is even more beautiful when cut and tastefully arranged for interior decorations. Cut when the first bud blossoms and given fresh water daily, it will open every bud to the last one, which will be as beautiful as the first. As the lower flowers wither they should be removed.

Culture-Gladiolus will grow and bloom in almost any kind of soil, if it can only have full exposure to the sun; it requires no fussing over. It is free from disease and insects. It will stand more dry weather than most flowers; it will even survive outright neglect, returning good for evil by its wonderful blooms. The easiest and most common method of planting is to prepare the bed in the fall by covering it well with manure, spading it in to the depth of 8 or 10 inches. If prepared in the spring use well rotted manure. The Gladiolus plant is very hardy and will survive considerable frost. Therefore, may be planted early in the season. In the latitude of Philadelphia, planting can begin about the middle of April and continue at intervals until the middle of June, when a continuous supply of flowers will be had from July until killed by cold in the fall. Plant the larger bulbs in rows, from 12 to 18 inches apart, and from 4 inches to 6 inches apart in the row, and about 4 inches deep. Plant the bulblets in the same manner, only an inch or so apart in the row, and about 2 inches deep. Cultivate them well once a week, and with an ordinary amount of moisture they should begin blooming within 60 to 70 days after planting, and continue until killed by frost.

Our exhibition of Gladioli during August attracts much favorable comment, at which time many buyers make their selection.

AMERICA-The most popular Gladiolus in cultivation. Splendid large, broadly-opened flowers of a beautiful clear fleshpink color, with petals well rounded. The plants are vigorous growers, not subject to disease, and make extra good bulbs. Ea., 5c.; doz., £0c.
BARON HULOT-Large flowers, well arranged on long spikes. Color is a deep indigo-blue, slightly marked white at the base of the throat. Ea., 12c.; doz., \$1.25.

BLUE JAY-Fine large flowers of velvety bishop's violet, shaded with purple and yellow; rich and novel and very effective as a cut flower used in conjunction with one of the yellow sorts. Ea., 15c.; doz., $\$ 1.50$.

CRACKER JACK. (L). Dark, rich velvety-red, throat spotted yellow and maroon. Ea., 10c; doz., $\$ 1.00$.

DAWN. (Tracy's.) Mauve-rose with slight tinting of fleshpink. Throat slightly clouded violet-rose. Anthers violet. Stigmas purple-rose. Four inches. Arch type; very fine. Ea., 30c.; doz., $\$ 3.00$.

EMPRESS OF INDIA-Rich, dark mahogany-almost black. Dwarf growing, but flowers of good size and free. Ea., 7c.; doz., 75 c .

FLORA. Beautiful canary yellow, with scarcely any markings. Considered the best yellow. Ea., 20c; doz., $\$ 2.00$.

GOLIATH-Of great value as a garden flower if planted in generous quantity; the mass of dark, purplish-blue flowers making a wonderful effect a mong the prevailing light shades of other Gladioli. Ea., 10c.; doz., $\$ 1.00$.

GLORY. (Kunderdi.) This beautiful ruffled Gladiolus has become quite popular. The flowers are broadly expanded and well placed on straight strong spikes. The color is a creamy white, softly suffused pale flesh over entire surface, with very pale rose reflections, lower petals suffused pale flesh in throat, mingled with Naples-yellow. Throat streaked amaranth. Strongly and beautifully ruffled. Four inches. Ea., 12c.; doz., \$1.20.

GRETCHEN ZANG. Pale rose Hermosa, washed bright rose. Throat deep lilac-rose with midribs a little more violet. The mingling of colors in this flower is unusual; the general effect fresh and very beautiful. Anthers pale rose. Flowers well opened to arch type. Three inches. Splendid spike. Ea., 12c.; doz.,\$1.25.

HALLEY-Large flowers of a lovely salmon-pink, lower segments blotched yellow, with carmine markings. An excellent variety; early. Ea., 7c.; doz., 70c.

HERADA. A new color in Gladiolus. Light violet deepening to magenta at tips of petals. Midribs pale lilac, nearly white. Small blotch of deep magenta. Flowers three inches. Showy and very good. Ea., 12c.; doz., \$1.25.

L'IMMACULEE-Undoubtedly the best commercial white Gladiolus in existence. Very tall spike, well set with large flowers of great substance. Ea., 15c.; doz., $\$ 1.50$.

MRS. DR. NORTON-New. This novelty has a distinct new form which is impossible to describe. Like a waxy cattleya, it resembles the finest orchid. Its stem is slender but tall, and its greatest charm is its color-a pale apple-blossom-pink, so fresh that it seems as if the blossom is just opening. We consider this the most exquisite Gladiolus today. Ea., 75c.

MRS. FRANK PENDLETON-All experts agree that this is one of the finest varieties yet introduced. The flowers are of largest size, borne on strong, straight spikes. In color a lovely salmon-pink with brilliant deep red blotches in the throat. A color combination rivalling many of the finest orchids in its richness, exquisite in every way. Ea., 10c.; doz., \$1.00.

MYRTLE. Pale mauve-rose, deepening on outer edge of petals. Flaked and penciled dark mauve-rose. Throat almost pure white. Three inches. Long spike. A delicately beautiful variety. Ea., 15c.; doz., \$1.50.

MRS. FRANCIS KING-A most beautiful flame pink. Immense flowers on a spike growing 4 feet high, with from 18 to 20 flowers, 6 to 8 being open at one time. Ea., $6 \mathbf{c} . ;$ doz., 60 c .

MRS. WATT-A most distinct and beautiful sort of a rich deep cherry-red. Ea., 8c.; doz., 85c.

NIAGARA-Of America character, but somewhat larger; rich cream color deepening to canary-yellow on lower petals. A faint carmine blush at tips of petals and streak at throat, with purple stamens and carmine stigmas, make a lovely combination. Ea., \&c.; doz., 85c.

ORANGE GLORY. This beautiful new Ruffled Glory has all the refined qualities of the original variety, Glory. The color is a splendid shade of rosy orange. The flowers are exquisitely ruffled and are well placed on strong, stiff stems. Ea., 30c., doz., $\$ 3.00$.

PANAMA-One of the choicest varieties, similar in habit to America, but in color a rich rose-pink. This variety should be in every collection. Ea., 10c.; doz., $\$ 1.00$.

PEACE-A grand white flower, very large, with pale violet feathering on lower petals; flowers correctly placed on a tall graceful spike. Should be planted early. Ea., 10c.; doz., \$1.00.

PINK PERFECTION-This magnificent sort is a soft apple-blossom-pink with chamois suffusion that is very attractive. Ea., 10c.; doz., \$1.00.

PRINCE OF WALES. A most charming coral pink, similar to Halley, but more delicate tint. One of the best of the recent introductions. Very early. Ea., 15c.; doz., \$1.25.

SCHWABEN. A most meritorious variety of wonderful vigor, with strong erect spikes and large well-expanded flowers, are a pure canary yellow, shading to a sort of sulphur yellow when opening; the golden yellow center is blotched with a brilliant brownish carmine. They open six to eight at one time, while about twenty finely-formed flowers are produced on the extremely strong stalks. This may now be considered the best and freest growing yellow variety. Ea., 10c.; doz., \$1.00.

WAR. The finest of its color yet introduced. Flowers often measure 7 inches across, of a deep ox-blood red, shaded crimsonblack. The flowers are well placed on spikes frequently attaining a height of 5 or 6 feet. The foliage is broad, deep green, almost as heavy as an iris leaf. A wonderful variety that can now be had at a reasonable price. Ea., 12c.; doz., \$1.25.

WHITE GLORY-A gorgeous pure white variety of the same type as Glory. The flowers are exquisitely shaped, splendidly ruffled, of pure white color with a lovely iris-blue throat. Ea., 40c.; doz., \$4.00.

YELLOW HAMMER-Yellow with slight red mark in throat. Ea., 10c.; doz., \$1.00.

MINGLE'S POPULAR MIXTURE - We pay particular attention in making up this mixture, and in it are included not only practically all the modern varieties of Gladioli in greatest variety of color, but also a goodly proportion of the higherpriced sorts. Doz., 35c.; per 100, \$2.50.

MINGLE'S RAINBOW MIXTURE-This fine mixture includes the very best Gladioli in existence. It is a well composed blend taking in all the above varieties and many other excellent colors. We can highly recommend this mixture to anyone who loves Gladioli, but does not care enough to plant the individual varieties. Each lot whether in dozens, 50 's or 100 's of our Rainbow. Mixture is put up separately to insure correct proportions of kinds and colors. Price per doz., 75c., 50 for $\$ 2.75$, 100 for $\$ 5.00$.


## PAEONIES

## BEAUTIFUL FLOWERS FOR DECORATION DAY

Paeonies are absolutely hardy and when once established will take care of themselves, making larger plants and producing greater numbers of flowers each year.

There has been a wonderful development in these flowers and the new varieties are far superior to those of ten years ago. The flowers are much larger and the variety of color much greater.

Plant them as early in the fall as possible, from five to six inches deep and from two to three feet apart. Be sure to put some well rotted manure or other fertilizer in the bottom of each hole. Press the ground carefully around the roots, being careful not to break the crowns.

Should the spring be very dry, water them a few times to promote a healthy growth of foliage, which is necessary to insure perfect blooming.

## Red Shades

AUGUSTIN D'HOUR-Brilliant rosy-red. The plants are of robust growth and produce extra large, very full blossoms. One of the earliest and best red varieties. Ea., 60c.; doz., \$6.00.

FELIX GROUSSE-Very large pure ruby-red, without any shades of violet or purple. Very dependable as a cut flower. Very free bloomer. Midseason. Ea., 60c.; doz., $\$ 6.00$.

## Rose and Pink Shades

FLORAL TREASURE-This variety has few, if any, superiors as a cut flower. It is an excellent bloomer, bearing fine, large blossoms on strong, stiff stems. Color of flower a bright light pink. Ea., 40c.; doz., $\$ 4.50$.

EDULIS SUPERBA-Large well-formed flower; brilliant rose-pink with silvery reflex. Very early and undoubtedly one of the most popular. Ea., 40c.; doz., $\$ 4.50$.

## BLEEDING HEART

SPECTABILIS-An old-fashioned favorite; its long racemes of graceful heart-shaped pink flowers are always attractive; it is used largely for forcing, and is perfectly at home in any part of the hardy border, and especially valuable for planting in the shade. May; 2 feet. Ea., 30c.; doz., \$3.15.

## CINNAMON VINE

A beautiful, hardy climber for anything on which the vines can twine; it grows from 15 to 30 feet high, and when established the vines attain a much greater length. The leaves are green, thick and glossy, always clean, healthy and free from insects. The white flowers, while insignificant, emit a delightful cinnamonlike perfume. Price, extra large, 2 -year-old roots, ea., 10c.; doz., $\$ 1.00$.

## CALADIUM

## (Elephant's Ear)

A very effective plant, and suitable for a single plant on the lawn, masses in beds, or for margins of water, its leaves often attaining the length of 3 feet by 20 inches wide. First size, ea., 45 c .; extra large bulbs, ea., 50 c ., postpaid.

## White Shades

DUCHESS DE NEMOURS-Outside petals white, center lemon-yellow. Ea., 50c.; doz., $\$ 5.00$.

FESTIVA MAXIMA-One of the grandest varieties in existence. The standard of perfection in Paeonies. It is a strong flower, very early, free flowering and very fragrant. The magnificent flowers are of a delicate pure white color, with some of the center petals flaked with carmine. The most popular white Paeony today. Ea., 40c.; doz., $\$ 4.50$.

QUEEN VICTORIA-A late bloomer, white, and extremely popular with florists. It produces white flowers with creamy centers, tipped with red. Ea.. 40c.; doz., \$4.50.

## MADEIRA OR MEXICAN VINE <br> (Hardy)

The tubers if planted deep and protected during the winter, are hardy. The leaf is a very deep green, and grows very dense; the flower is very small, white in color. Strong roots, ea., 10c.; single roots mailed free; ea., 10c.; doz., $\$ 1.00$.

## TUBEROSE Double Dwarf Pearl

Plant dwarf, growth stocky, the flower spikes attaining a height of about 2 feet, and are compactly filled for two-thirds of their length with very large, perfectly double flowers, $11 / 2$ to 2 inches across, or nearly twice the size of the old sort. The flowers have the wax-like substance of a Camellia, are glistening white and deliciously fragrant. The bulbs planted in the garden in May, in warm, rich soil, in a sunny position, flower with great certainty in the fall. If early flowers are wanted, the bulbs may be started in pots in the house from February to April, removing the plants to open ground when it is warm enough in May. Price, extra large flowering bulbs, Ea., 8c.; doz., 85c.


# PENNSYLVANIA QUALITY LAWN MOWERS 

Pennsylvania Quality Lawn Mowers cost a great deal more to make and a little more to buy, but the service they give ultimately makes them cheaper-they last so long the cost is forgotten.

Some of the features which make the Pennsylvania stand out among all others are the open cylinder and the open wheel, and the self-sharpening device, the Pennsylvania being the first machine to make a successful ball-bearing mower.
The advantages of a train of gears over internal gears, makes the former run more easily and steadily by reason of their great length of wheel base.
There is the additional advantage of better distribution of wear and tear and increased power and spread.

The Pennsylvania, Jr. has all the good points of the Standard Pennsylvania, with the addition of some features that make it the most perfect grass cutter in the world. Its elf-sharpening features alone will make it worth its cost to the user, as it will save this expense until the blades are worn out-in average use a dozen years or more.

| 10-inch Wheels. Five-Blade Cylinder $6^{\prime \prime}$ in diameter |  |  |  |
| :---: | :---: | :---: | :---: |
| 16-inch | \$30.00 | 19-inch | \$38.00 |
| 17-inch | 34.50 | 21-inch | 42.00 |
| 8-inch Wheels. Five-Blade Cylinder $51 / 2^{\prime \prime}$ in diameter |  |  |  |
| 12-inch | \$15.50 | 16 -inch | \$21.00 |
| 14-inch | 18.50 | 18-inch | 24.00 |

The Great American ball bearing is the best all-around mower of its type in the world. The perfectfitting ball cups and cones insure an easy-running machine. Double geared, which gives fine results.

10 -inch Wheels. Five-Blade Cylinder $6^{\prime \prime}$ in diameter

| 15-inch. | \$19.50 |
| :---: | :---: |
| 17-inch. | 22.50 |
| 19-inch. | 25.00 |
| 21-inch. | 28.00 |

The Standard Pennsylvania is the pioneer of all lawn mowers, having an open cylinder, open wheels and a train of gears.

High Wheel, $101 / 2^{\prime \prime}$ in diameter
15-inch............. . . . . . . . . $\$ 27.00$
17-inch..................... . . . . 30.50
19-inch. . . . . . . . . . . . . . . $\quad 34.50$
21-inch. . . . . . . . . . . . . . . . . . $\quad 28.50$

COLDWELL'S "IMPERIAL" MOWER


Coldwell's "ImPERIAL" Mower is of exceptionally good value; it has five blades in the revolving cutter. In offering it to the trade we have no hesitancy in saying that it is the best moderatepriced mower on the market. The drive wheels are $101 / 4$ inches in diameter and have a wide tread which gives it good traction and prevents the mower from sinking in soft ground. The gears are fine cut and fully protected from the cut grass and dirt. The revolving cutter is six inches in diameter and is carried on roller bearings of the same size, material and design as is used on our more expensive grades of mowers. The bottom or stationary knife is a highly tempered steel blade, heavier than those used on other makes of mowers of this grade. The ratchet has a flat steel pawl placed in the revolving cutter gear and acting with it. It is strong and reliable. It is far superior to any other of its class in material, workmanship and design. It cannot fail to give satisfaction. 5 blades. High wheels. $101 / 4$-inch.

| 14-inch cut | \$18.50 |
| :---: | :---: |
| 16 -inch cut | 20.00 |
| 18-inch cut | 22.00 |
| $20-\mathrm{inch}$ cut | 23.00 |

## PENNSYLVANIA LAWN TRIMMER (Ball Bearing)

Made to meet the demand for a serviceable tool to take the place of grass shears and other devices for cutting the grass left at the edge of lawns after mowing.
Will cut to within three-eighths of an inch of wall or tree trunk, and mow any border wide enough to run one wheel on.
Price
Price................................................................................ . . $\$ 10.25$

## THE CADET

This is a good lawn mower at a medium low price, and gives the purchaser full value for his money. It has brass bushings and the same ratchets and adjustments that are used on many of the high-grade mowers. The gears are fine cut, and it is in every respect what is needed at the present time, viz. a mower that will do good service and at a cost but little higher than the poor trash that is put out so freely.
Diameter of Drive Wheels: Eight inches.
Number of Blades: Three.


THE CADET

14-inch cut. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8.00
16-inch cut. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 9.00


Coldwell's Duchess Mower is a specially good mower. It is made on thoroughly practical lines and is so constructed that it cannot easily be disarranged. The drive wheels are 9 inches in diameter with the gears raised up from the ground, fully protected from the dirt and cut grass. The revolving cutter is 6 inches in diameter and has four crucible steel blades, highly tempered and ground true their entire length. It is carried on our patented adjustable ball bearings. The simplicity and convenience of the adjustment of these bearings is appreciated by every one familiar with them. The ratchet has a flat steel sliding pawl, placed in the revolving cutter gear. 14 -inch cut, $\$ 10.50 ; 16$-inch cut, $\$ 11.25 ; 18$-inch cut, $\$ 12.00$

## HOSE EQUIPMENT



Perfect. Made entirely of brass, with swivel motion-No band required.

For $3 / 4$-inch hose, 15c. each; doz., $\$ 1.50$.

## HOSE COUPLINGS

## Pair Doz.

Plain Brass, $1 / 2$ in. $\$ 0.25 \$ 2.50$
Plain Brass, $3 / 4$ in. . $25 \quad 2.50$


Cooper Hose Mender $3 / 4$ inch 10 c. each; $\$ 1.00$ per doz.

## SURE GRIP HOSE MENDER

$3 / 4$ inch, 6c. each; per doz., 50 c . Parcel Post Wt., doz., 1 lb .
Hose Washers. 1 inch, 15 c . per doz.; $1 / 4 \mathrm{lb} ., 50 \mathrm{c} . ; \$ 1.75$ per lb.; $3 / 4 \mathrm{inch}, 10 \mathrm{c}$. per doz.; $1 / 4 \mathrm{lb} ., 35 \mathrm{c} . ; \$ 1.00$ per lb.

HOSE NOZZLES
Boston. Regulated to give three different streams.
Price, . . . . . . . . . . . . . . . . . 75c.
Diamond. ...... each. 60c.

## HYDRANT ATTACHMENTS

To be used for attaching Hose to smooth faucets.
No. 2. For small spigot, 60c. For large or standard spigot, 60c. Parcel Post Weight, $1 / 2 \mathrm{lb}$. each.

## TREE TANGLEFOOT



Tree Tanglefoot is a sticky compound similar to that used in making Tanglefoot Fly Paper and is especially adapted for protecting trees from the attack of climbing and creeping insects, particularly gypsy, brown-tail and tussock caterpillars, canker worms, climbing cut worms and ants. On matured fruit trees and all shade trees it is applied directly to trunks, but on young fruit trees we recommend application over strips of manila paper.

One pound makes 9 to 10 lineal feet of band. One application remains sticky three months and longer or 10 to 20 times as long as any other known substance. On account of this great superiority, it has practically displaced all other banding compounds in the United States and in many foreign countries. Tree Tanglefoot works alike in rain, sun, winds, etc. Does not soften, run or melt, yet is always elastic, expanding with growth of tree. No mixing required; simply open can and use. Applied with wooden paddle. Will not injure trees.

For tree surgery, Tree Tanglefoot is superior to anything on the market. It is the best application after pruning or trimming-it will waterproof the crotch of a tree, or a wound or cavity in a tree when nothing else will do it. For this purpose one application lasts several years, all the time wholly impervious to air and water.

Guaranteed to keep perfectly many years in original packages. Price, 1 lb., 60c.; 5-lb. can, $\$ 2.75$; 10-lb. can, $\$ 5.25$; 25 lbs., $\$ 11.00$.

## NO. 2 PLANET JR. EDGER



To keep grounds looking neat and attractive the grass bordering all walks must be frequently edged and the No. 2 Planet Junior Edger will do this work quickly and with little effort no matter if the walks are straight or curved or if they are of cement, stone or brick. Price, $\$ 1.80$.

## RUBBER HOSE



Mingle's Seamless or Molded, 3/4-inch. \$0.18 Special Lehigh, 6-ply, $3 / 4$-inch . . . . . . . . . . 16 Special Lehigh, 5-ply, 3/4-inch. . . . . . . . . . . . 14 Revero Spray Pump Hose .14

25-foot lengths and upward, coupled free, smaller sections couplings ..... per pair . 20

## COLDWELL'S LAWN TRIMMER



This machine meets the demand for a real first-class lawn edge or border trimmer. Made of best material throughout, ball bearings, single screw adjustment, bottom knife of finest tool steel; cuts a swath of 8 inches. Price, $\$ 10.50$.


No. 1-12 to 16 -inch mower, inclusive.... . . $\$ 2.25$
No. 2-16 to 20 -inch mower, inclusive . . . . . . 2.50

## PLANT STAKES (SQUARE)

For greenhouse or garden use. These are painted green and nicely tapered and finished.

|  | EACH | DOZ. | 100 |
| :--- | ---: | ---: | ---: |
| $11 / 2 \mathrm{ft} . . \$ 0.03$ | $\$ 0.25$ | $\$ 1.85$ |  |
| $2 \mathrm{ft} \ldots .$. | .04 | .40 | 2.60 |
| $21 / 2 \mathrm{ft} .$. | .05 | .55 | 4.00 |
| $3 \mathrm{ft} . .$. | .08 | .85 | 7.00 |
| $31 / 2 \mathrm{ft}$. | .10 | 1.00 | 8.00 |
| $4 \mathrm{ft}.$. | .12 | 1.20 | 9.50 |
| $5 \mathrm{ft} .$. | .14 | 1.58 | 13.50 |
| $6 \mathrm{ft} . \ldots$ | .18 | 2.00 | 16.00 |

## EXTRA HEAVY

The extra heavy sizes have black painted points to prevent moisture entering the fibre of the wood.

|  | EACH | DOZ. | 100 |
| :--- | ---: | ---: | ---: |
| $4 \mathrm{ft} \ldots$. | $\$ 0.20$ | $\$ 2.25$ | $\$ 18.00$ |
| $5 \mathrm{ft} \ldots$. | .25 | 2.75 | 20.00 |
| 6 Ift.... | .35 | 3.50 | 28.00 |

HEDGE TRIMMER AND PRUNER


Simplicities cut both in opening and closing. Think of it! What a time and energy saver this is. Seem to almost work automatically and you must actually try them to realize how easy they work.
Pruner and Trimmer \$6.00
Trimmer .4 .00

## RAINFALL SPRINKLER



A splendid sprinkler that operates on a ball bearing, requiring very little pressure.
Each............. . . . . . . . . . . . . . . . . $\$ 1.85$


TRELLISES
These Trellises are made entirely of wood, and therefore will not burn vines when exposed to the sun. Where metal is used the vines do not thrive owing to the fact that the heat absorbed from the sun causes the plant to be stunted, if not killed.

Our Trellises are suitable for all locations, they are painted dark green, and are very durable.


## FAN TRELLIS

A very popular style for Roses
in. an, 10 in . wide at top .... 50
30 in. fan, 13 in. wide at top . . . . . . 80
ft. fan, 16 in . wide at top..... . . 1.25
$1 / 2 \mathrm{ft}$. fan, 21 in . wide at top . . . . . 1.35
ft. fan, 27 in . wide at top. . ... 1.50
ft. fan, 32 in . wide at top. . . . . . 2.25
ft. fan, 38 in. wide at top . . . . . 2.50
ft. fan, 42 in. wide at top. . . . . 2.85
ft. fan, 46 in. wide at top . . . . . 3.25


The Midget is the smallest revolving sprinkler in our line. A very serviceable, reliable and satisfactory sprinkler.

Brass head and arms. Each..... $\$ 1.25$


The Ring Sprinkler, illustrated above is made of heavy brass, firmly constructed and is guaranteed to stand the water pressure of any municipal water works in the United States.
The perforations are so arranged as to give a finely divided, well distributed mist. The Ring does not get out of order, has no wearing parts to wear away or get loose or become lost.

Stands $11 / 4$ inches high and is 8 inches in diameter. Each................. $\$ 1.00$


A beautiful embossed bowl, especially designed for ferns and shallow potted plants. Color a beautiful light buff. 6 inches inside diam. by 3 inches deep
Price
$\$ 1.50$

## POT GARDEN AND TREE LABELS

Plain, pointed wood for flowers and all plants.


## RUBBER SPRINKLERS

For spraying small plants, ideal for house use.

Made in two styles.
Bent neck and straight neck.

| SIZE | PRICE |
| :--- | ---: |
| 6 oz. capacity . . . $\$ .75$ |  |
| 8 oz. capacity . . . | 1.00 |
| 10 oz. capacity . . . . | 1.25 |

## NEPINSET

## WATER PROOF PAPER FLOWER POTS



For transplanting and shipping potted plants, and for starting many kinds of hotbed plants.

|  | Doz. | 100 | 1000 |
| :---: | :---: | :---: | :---: |
| $21 / 1 \mathrm{in}$. Pots. | \$0.12 | \$0.49 | \$4.42 |
| 21/2 in. Pots. | . 14 | . 56 | 5.07 |
| in. Pots. | . 18 | . 76 | 6.89 |
| $31 / 2 \mathrm{in}$. Pots. | . 20 | 1.00 | 8.97 |
| in. Pots. | . 25 | 1.24 | 11.18 |
| in. Pots. | . 30 | 1.91 | 17.42 |
| in. Pots. | . 45 | 2.58 | 23.03 |



EARTHEN BULB POTS


These are fine for planting with bulbs, for ferns and other compact plants.


EARTHEN FLOWER POTS


BULB BOWL


Handsome embossed bulb bowl of a beautiful moss green color, 10 inches in width, especially designed for bulbs.
Price

PLANT TUBS


Made of White Cedar, painted green, electric welded heavy wire hoop without handles. We sell handles, separate, 10c. pair.

|  | Inside | Inside |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Top | Bottom | Inside |  |
| No. | Diam. | Diam. | Depth | Each |
| 1 | 6 in. | 5 in. | 6 in. | \$0.65 |
| 2 | 7 in . | 5 in. | 7 in . | . 75 |
| 3 | 8 in . | 6 in. | 8 in . | . 80 |
|  | 9 in . | 7 in. | 9 in . | . 90 |
| 5 | 10 in . | $71 / 2 \mathrm{in}$. | 9 in. | 1.00 |
| 6 | $11 \mathrm{in}$. | $81 / 2 \mathrm{in}$. | 10 in . | 1.25 |
| 7 | 12 in . | 9 in . | 11 in . | 1.50 |
| 8 | 13 in. | 10 in. | 12 in. | 1.90 |
| 9 | 14 in . | 11 in. | 13 in . | 2.20 |
| 10 | 15 in . | $111 / 2 \mathrm{in}$. | 14 in. | 2.35 |

## CEDAR TREE TUBS

New York Pattern
Made of choicest seasoned White Cedar. Highly finished, iron hoops, iron feet, drop handles.


| No. | $\begin{aligned} & \text { Inside } \\ & \text { Top } \end{aligned}$ | Inside |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Bottom | Inside |  |
|  | Diam. | Diam. | Depth | Each |
| 1 | 12 in . | $93 / 4 \mathrm{in}$. | $10 \mathrm{~s} / \mathrm{in}$. | \$2.75 |
| 2 | 13 in. | $103 / 4 \mathrm{in}$. | $123 / 4$ in. | 3.50 |
| 3 | 141/2 in. | 12 in. | $143 / 4 \mathrm{in}$. | 4.50 |
| 31/2 | 161/2 in. | $141 / 8 \mathrm{in}$. | $143 / 4 \mathrm{in}$. | 5.50 |
| 4 | 191/2 in. | $171 / 4 \mathrm{in}$. | $16 \frac{18}{8} \mathrm{in}$. | 6.25 |

## SPRINKLING POTS



Heavy Galvanized Iron.

| qt. size. | . $\$ 1.00$ |
| :---: | :---: |
| 6 qt. size. | 1.15 |
| 8 qt. size. | 1.30 |
| 10 qt. size. | 1.55 |
| 12 qt. size. | 1.65 |

# LAWN AND GARDEN TOOLS 



## TRANSPLANTING TROWELS



No. 020 Narrow Blade . $\$ 0.20$ No. 21-6" Narrow Blade (see cut) . . . . . . . . . 15 $8^{\prime \prime}$ " $\quad$..................... . 25

## TROWEED TROWEL

Trowel and Weeder Combined
One edge being cut similar to a saw, used for digging roots, etc., other side for use as a trowel.
Price. $\qquad$ $\$ 0.50$

## GARDEN SET



No. 100 consists oi heavy Shank Hoe, heavy five-tooth Malleable Iron Rake and heavy six-inch English Pattern Trowel. Finished in Red Enamel. Fine finished handles.

Prlce per set three pieces. .$\$ 0.85$


A popular combination of three tools, used by ladies, children and for special uses where small tools are required. No. 3 P. F. per set. $\$ 1.75$

For potting flowers, etc. Good quality steel. Price, 50c.

## EUREKA WEEDER.



A good tool for scratching about plants. Price, 50c.


Five teeth, good quality. Price, 15c.


## MAGIC WEEDERS



Style A.

Magic Weeders should be in every garden outfit. They fulfill their name wonderfully. They are strong in construction and very popular.

Style A-51/2" handle 15c
" B-18" " 25c
" D-6" " 45 c
" F-42" " no blade. . .... 75c
" H-48" handle,
with blade, $\$ 1.25$

Style B.

## PULL EASY CULTIVATORS

These cultivators can be adjusted to any width. P. E. J., -4 teeth, with 4 -foot handle, adjustable, 2 to 6-inch Rows, 75c. each.
P. E. J., -5 Teeth. Handle 4 foot long, adjustable 6 to 12 inches. $\$ 1.25$ each.
P. E. C., 9 teeth, $41 / 2$-foot handle. Will cultivate rows 6 to 18 inches wide. $\$ 1.50$ each.


For Planting Bulbs, Etc.
Equipped with wooden handles.
Brass point.
$\$ 0.85$
Iron point
.60

## HAZELTINE WEEDER



No. 2 . . . . . . . . . . . . . . . . . . . . . . . . . . 35 c.
NORCROSS CULTIVATORS


An excellent tool, adjustable teeth for spanning the row by removing centre tooth, or between rows using any number of teeth. We carry two sizes.
5-prong, long handle (see cut) . . . . $\$ 1.10$
3-prong, " " ............. . 85
3-prong, short " ............. . 45
HOE AND RAKE COMBINED


An excellent tool for the garden. Made of the very best steel.
4-prong (see cut), . . . . . . . . . . . . . . . . $\$ 1.00$
6-prong,
1.10

## TRANSPLANTING HOES



No. 41
No. 1
Used for setting out tomato, egg plants and other plants. Avoids kneeling when planting. Made of best steel.
No. 41


For trimming paths.
No. 11-R .......
No. 040 (see cut) $\$ 0.85$ 1.35


No. XGS, 8 in. . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 0.90$


The Warren or Pointed, a quite popular Btyle. No. W. 7 (see cut) . . . . . . . . . . . . $\$ 1.10$ No. Raby Warren Hoe. A good transplanter, same shape as above; very short hanAle.
Price . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 0.50$


Two prong, very useful in working narowrows, price, 50c.
One prong onion hoe, 50 c .
SPADING FORKS.


Fine quality steel. Strapped shank. D handles Four, prong
. $\$ 1.50$
Boys or ladies'................................ 1.15
Five prong, extra quality.................. 2.25


MANURE FORKS.


No. 04D-4 tine, strapped shank, D handle $\$ 1.55$ No. 04DZ-4 tine, strapped shank, D handle 1.00 No. $0441 / 2$ Z- 4 tine, plain ferrule, hent handle 1.00


For working manures, digging out potatoes, etc.
No. 4 B. O. L., 4 tine. . . . . . . . . . . . . . . . . . $\$ 1.25$
No. 4 B. O. H., 4 tine.
1.50

No. 5 B. O. L., 5 tine. 1.50

No. 5 Batchellor. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.65

## LAWN RAKE



Heavily tinned steel teeth. The arched teeth for litter and the opposite side for fine-cut grass. Heavily braced, holted socket.
"QUEEN" 24 teeth-Price, 85 cents
STEEL BOW RAKE.


The teeth have a slight curve as shown in cut. Some people prefer this style. $\begin{array}{lllll}\text { B } & 10-10 & \text { tooth, } \\ \text { B } & \$ 0.80 & \text { B } & 12-12 & \text { tooth, } \$ 1.05 \\ \text { tooth, } & 85 & \text { B } & 14-14 & \text { tooth, } \\ 1.10\end{array}$ B 11-11 tooth, 85 B 14-14 tooth, 1.10

OLE OLSEN LAWN RAKE.


Rake head slightly curved from centre to each end which does not allow any material that has heen caught by the teeth to slip around the edges. 26-tooth Hickory wood. Price, $\$ 1.25$.

## MATTOCKS


(Price includes Handle)
Axe, pointed....................... . . . $\$ 1.50$
Pick, pointed. . . . . . . . . . . . . . . . . . . 1.50
Half Mattocks or Grub Hoes. . .... . 1.50
PICKS (Prices include Handle)
All steel Double point, $\$ 1.35$; axe point, $\$ 1.35$

## FIELD HOE



For digging up stubble, small stumps; also for digging up small plots of ground for planting! purposes, etc.
No. 1. 6-inch blade, each. . . . . . . . $\$ 1.00$
No. 2. 7-inch blade, each.......... . 1.10


## GIBBS POST HOLE DIGGER



Digs a hole $31 / 2$ feet deep. A positively good tool.

## Garden Seed Drills, Wheel Hoes and Cultivators

No. 4 Planet Jr. Comblned HIll and Drill Seeder, Wheel Hoo,


Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills), plows, opens furrows and covers them, hoes and cultlvates quickly and easlly all through the season.

No. 25 Planet Jr. Combined HIll and Drill Seeder, Double Wheel


No. 25 is for gardeners, who have enough acreage for a double-wheel hoe to be used, and yet prefer not to buy seeders and wheel hoes separately; also for onion growers and for the and wheel hoes separately; also for onion growers and for the large famly garden where both a single and double-wheel hoe double and single-wheel hoe. Unbreakable steel frame. Capa-city-2 acres a day.


The ideal tool for small gardens-combining a reliable seeder for all garden seeds from the smallest up to peas and beans, with a light runnlng Wheel Hoe. Practical for men, women or growing boys. Sold at a price that will make lt pay to use even is your garden is a very small one. Stop in and see them. It's worth your while.


Price with hoe only (No. 13), $\$ 8.25$
Planet Jr. Wheel Hoes have been greatly improved. No. 12 has new 14 in. steel wheels, steel frames, steel arch, steel leaf lifters. The Hoe's cultivator teeth and plows are specially hardened to give longer wear, scour better and run easier.

The greatest hand-cultivating tool in the world.


The highest type of Single Wheel Hoe made. Light, but strong, and can be used by man, woman or boy. Will do all the cultivation in your garden in the easlest, quickest and bent way.

Indestructible steel frame. New steel wheel, specially hardened attachments will do better work and last longer.

Gem Single Wheel Hoe.
Llght, strongly built tool with smaller wheel, scuffle hoes for work between rows, pair of plows and five


## SUPERIOR GARDEN PLOW

The Superior Garden Plow has two bent wood handles. The frame and tools are constructed of steel, and are mechanically correct, making it one of the neatest and lightest-running plows on the market.

The handles can be raised or lowered to suit operator. This plow is equipped with shovel hoe, plow, two cultivator steels and weeder; also one wrench. Height of wheel, 24 in . Price, complete, $\$ 3.40$.


## Fire-Fiy Garden Plow.

Price, $\$ 4.25$
Especially useful to owners of small gardens, and to chicken raisers for plowing up scratch-ing-yards. Its light weight makes it easy for man, woman or boy to use. Enables the owner of a family garden to do all the work in spare minutes.

Plain Dixle Jr., No. 37 Cultivator, $\$ 7.50$.
A light weight tool, built for use in light sandy soils. Opens to 20 inches and closes to 9 inches with a clamp


## WHEELBARROWS, GARDEN AND FARM.



These Barrows are made from well seasoned lumber, very strongly bolted together, extra braced, with high finish. If you want a barrow to give service-one that will stand not only use but abuse-then this is the one-"the Buch."

No. 1-Large Farm Barrow, 3 inch tread. . . . . . . . . . . . . . $\$ 10.00$
No. 2-Small Farm Barrow, 23/4 inch tread.............. . . 8.25
No. 3-Garden Size, 2¼ inch tread. . . . . . . . . . . . . . . . . . . 7.50
No. 4-Small Garden Size, $11 / 4$ inch tread.............. . 5.50


## Llst of Parts.

| Double moldboard and share | \$1.25 | Standard, complete. | \$3.00 |
| :---: | :---: | :---: | :---: |
| No. $21 / 2$ Moldboard. | 1.10 | Cabbage Moldboard. | . 55 |
| No. 2 Moldboard. | . 85 | Landside. | . 50 |
| No. 11/2 Moldboard | . 75 | Stares. | . 40 |
| Beam with clevis. | 1.40 | Beam without clevis. | 1.10 |
| Handles complete. | 1.75 |  |  |


|  | List of |
| :---: | :---: |
| Double moldboard and share | \$1.25 |
| No. $21 / 2$ Moldboard. | 1.10 |
| No. 2 Moldboard. | . 85 |
| No. 11/2 Moldboard. | . 75 |
| Beam with clevis. | . 1.40 |
| Handles complete. | air 1.75 |

Standard, complete. . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 3.00$
Cabbage Moldboard. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 55
Landside. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50
Beam without clevis..................................... . . 1.10


One of the most successful traps; never misses.


## DISSTON TREE PRUNERS

Disston's Little Giant Pruner. . . . . \$2.25
Disston's Little Giant Pruner with Saw Attachment. ................. . 2.75
Telegraph Pruner..................... . . 2.00
Disston's Orchard Hook and Saw. . . 3.50

Poles for Tree Pruners
12 ft. long. . . . . . . . . . . . . . . . . . . . . . . $\$ 2.25$
14 ft. long........... . ...... ...... 2.50

## WATERS TREE PRUNERS

## (Equipped with Poles)

Removable blade, which can be renewed when worn out:

Plain, without Pole........ . $\$ 1.50$
With Removable Cutting Blades and Pole complete:

| 4 ft . | \$2.00 |
| :---: | :---: |
| 6 ft . | 2.25 |
| 8 ft . | 2.50 |
| 10 ft . | 2.75 |
| 12 ft . | 3.00 |
| Extra | . 35 |



## DISSTON PRUNING SAWS



No. 40 18-inch Avery Double Each Edge................................ $\$ 1.25$ No. 40 20-inch Avery Double Edge. ........................ . .
No. 7-16-inch Single Edge...... 1.60
No. 7-18-inch Single Edge.....
18-inch Paragon curved Double

## Edge.

Disston California-14-inch Blade

## Swivel Saw:

Very handy for getting among closely branched limbs, blade can be swiveled around in the frame to suit any desired position.

Handles can be unscrewed and a pole attached when desired.
Price.
$\$ 2.00$
Extra Blades.
each $\quad .40$
GRASS HOOKS

Lawn King.
. $\mathbf{\$ 0 . 8 5}$
Little Giant. .75
" " , Jr.. .60
" " , Adj.
Eng. Rivet Back .50

Mingle's Special. .85 .35


Our pruning shears are procured from the most reliahle makers and all are fully guaranteed. 65 Pexto.

50, California Style, 9 in
0, Medium Grade

Spiral Springs for any of the above Pruning
Shears, each,
263, 9 in.

## "McKENNEY" TREE LOPPERS

The "McKenney" Tree Loppers
 were designed and huilt to meet the were designed and huil to meet the requirements of the fruit growers of America. They have installed in them all the features that
What we claim for the "McKenney" What w
PrUNER:

1. The easiest cutting pruner in the world.
2. The only perfect cutting pruner in the world. One that does not injure the hark in any way, as both hlades have cutting edges.
3. The only pruner that will cut seasoned limbs $11 / 2$ inches in diameter. 4. The lightest pruners on the market. 5. "McKenney", Pruners are made of steel throughout. Nothing ahout them to hreak.

The hlades on the "McKenney" Pruners are dropped forged from the har steel and therefore are as strong as they can possihly he made.

The handles are of steel. The handrip is designed so that the pruner may grip is designed so that

Made in two sizes: No. 1 and No. 2. Made in two sizes: No. 1 and No. 2. diameter.
The No. 2 cuts limhs up to $11 / 2$ inches in diameter.

| WEIGHT | LENGTH | PRICE |
| :---: | :---: | :---: |
| To. $1-2$ lhs. | 23 inches | $\$ 4.50$ | $\begin{array}{llr}\text { No. } 1-2 \text { lhs. } & 23 \text { inches } & \$ 4.50 \\ \text { No. } 2-5 \text { lhs. } & 30 \text { inches } & 6.50\end{array}$

## SCYTHE STONES



Darhy Creek.
English Round . $\$ 0.18$
Carborundum .40


The one easiest to apply and put in convenient packages. $1 / 4$ H., 15 c .; $1 / 2 \mathrm{tb}$., 25 c .; 1 th., 45 c .; 5 tbs., $\$ 2.00$.

## GRAFTING TOOLS

Made of the best steel. For grafting trees, etc.
All steel .
Grafting Mallet
$\$ 1.00$

## HEDGE SHEARS



| 61/2 in. (Laddi | \$1.50 |
| :---: | :---: |
| 8 in. | 2.2 |
| $9 \mathrm{in}$. | 2.50 |
| 10 in. | 2.75 |
| 12 in . | 3.00 |

## GRASS SHEARS

Do not buy a cheap grass shear, they do not last long, nor do they keep a sharp edge, which is an essential in trimming grass; our list comprises the best makes.


## TREE SGRAPERS

For removing loose bark from trees prior to spraying. Steel blade may be detached and sharpened.
No. 5, Short Handle.
$\$ 0.60$


This sheller is an excellent one for small poultry farms. Fastens to box or barrel. Shelled corn drops in box, cob thrown outside.

## Price

.$\$ 3.00$


The American. The best hand dropper; possesses automatic metal cut off, easy to set. Price, $\$ 3.15$.


## DOUBLE SCYTHES

Double ribbed backs, reinforced steel heel extending along the heel end of the blade, making the scytbe strong and rigid at this point and giving additional weigbt and making it bang better and easier of operation. Thoroughly hardened and tempered keen tough edge.
Rivet back- 32
Rivet back- 34
Brush or Briar.
Weed. .
Geed...
Grass- 32
Grass-
Grass-34
hs are made of tbe best quality selected timber, seasoned proper proportion to make swing of the swath correct and easy.

Handles, etc.

| Regular Scythe style . | \$2.00 |
| :---: | :---: |
| Swath Clips. | . 25 |
| Handle rings. | . 12 |
| Handle Loop | . 25 |

## TWINE

Asparagus Twine, 3 ply, per ball
\$0.15
Binder Twine, 5-1b bale, per bale . . . . . . . . . . . . . . . . . . . . . . . 1.25
Cotton Twine, 3 ply, per ball . . . . . . . . . . . . . . . . . . . . . . . . . 15
FODDER TWINE (Tarred)
25 and $50-\mathrm{lb}$. bales, per lb.............
JUTE WRAPPING TWINE
$\$ 0.12$
Per ball $\$ 0.15$

## CORN KNIFE



Price, $\$ 1.00$
Oil hardened and temper drawn. Wood handle. You will find this a firstclass tool and dependable.

## KRAUT CUTTER



Made of hard maple, heavy construction, adjustable knives, best knife steel. Sliding box; wood or metal bed.


SLAW OR CABBAGE CUTTER.


Made of hard maple. Heavy construction, adjustable, best knife steel. Two blades. Price, 50 c .

"CONCAVE" Price, 50c.
Some growers think tbe concave knife takes hold better.

"FLAT" Price, 50c.
An asparagus knife is a necessity for large or small growers. Crop will be gathered in ibetter shape and time saved.

"FISHTAIL" Price, 50c.
Ten-inch blade, drop forged, well ground, enameled shank. A handy tool, also, for cutting out weeds on the lawn.

## ASPARAGUS BUNCHER



Even where one has a limited amount of asparagus to market, it pays to use a buncher. It is tied quickly and looks uniform.
Price, with knife guard
$\$ 4.00$

## HUSKING PINS

Combination leather and metal.
Price, each.
25c.

## ASPARAGUS TAPE

For tying Asparagus and Celery, fast color and will not fade, very strong and will not break. 1000-yard spools, colored red or blue.
Price, per spool
$\$ 4.00$


For sowing all kinds of seeds; has very perfect regulator. Sows from four to eight acres per hour. A superior machine. Price, .. $\$ 6.50$

RICHMOND CEDAR BUTTER CHURNS


No. 1-3-gallon. . . . . . . . . . . . . $\$ 3.75$
No. 2-4-gallon. 4.50 No. 3-7-gallon. . . . . . . . . . . . . 5.25

## BUTTER PRINTS

Made of Hard Maple Wood, three pieces to set, square. 1 lb . size, 65 c .

CYCLONE SEED SOWER


Cyclone (New Improved Model). An accurate portable seeder, for all broadcast sowing or fertilizing. Fits comfortably over shoulder; provided with automatic adjustment for stopping flow of contents when required. A great time and labor saver. Each, \$2.25, Postpaid.

No. 35 PLANET JUNIOR SEEDER ATTACHMENT


This small seeder can be attached to any Planet Junior Single or Double Wheel Hoes or Garden Plows and will be found particularly suitable for Plows and will be found particularly suitable for
the small kitcben garden. It will plant practically the small istcben garden. It will plant practically all seeds in a straigbt, continuous row, at a uniform
deptb, in a fraction of the time required by band deptb, in a fraction of the time required by band
and infinitely better. Tbe hopper bolds one pint and infinitely better. The hopper bolds one pint of seed. Also has a bracket to whicb a bandle can be attached and used independently of the wbeel hoe. Everyone having a kitcben garden sbould bave one of these useful seeders.
No. 35 Seeder Attachment.
. $\$ 7.00$
No. 35.D Seeder Attachment, witb handle... 7.75


Made of hard wood, first class in every particular. Grinds any kind of berries, apples or grapes.

Price, $\$ 3.75$.

## PERFECT FRUIT PICKER



Made substantially of galvanized wire. Can easily be attached to a pole of any length. Price, 40 c .

## CIDER OR WINE PRESSES

These presses are very substantially built of hardwood and well bolted together.


PRESSES
No. 0. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 8.50$
No. 1. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 11.00 No. $2 . .$. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 13.50
No. 3 (as shown above)... . . . . . . . . . . . . . . . 19.50
No. 3, Hinged Tub. . . . . . . . . . . . . . . . . . . . 24.00
No. 4, Hinged Tub . . . . . . . . . . . . . . . . . . . 30.00
No. 5, Hinged Tub . . . . . . . . . . . . . . . . . . . . 36.85


## Comblned Grinders and Presses

Self-Feed. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 20.50$
Junior No. 1 . . . . . . . . . . . . . . . . . . . . . . . . . . . 29.75
Medium (as sbown above) . . . . . . . . . . . . . . . 34.00
Senior. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50.00

GRAPE BAGS
For protecting growing grapes against the ravages of birds, insects, etc. Easily attacbed and lasts a season. Fruit will ripen just as readily in lasts a season. Fruit will ripen just as readily in
bags as it does in the open. Bags sbould be atbags as it does in the open. Bags sbould be atsbould be left attached until the fruit is ready to barvest.
2-ib. size. . . . . . . . . . . . . . . . . . . . . . . . . . 40c. per 50 . per 100
3 -fb. size. . . . . . . . . . . . . . . . . 100 4-円゙. size........................... 60c. per 100


The above cut shows our handsome WHITE OAK (quarter sawed) kegs, for holding wines, fruit juices, extracts, etc. They are carefully made
of selected WHITE OAK, bound witb beavy steel of selected WHITE OAK, bound with beavy steel
boops, and nicely varnisbed. boops, and nicely varnisbed.
$\begin{array}{llllll}\text { Gallons....... } & 5 & 10 & 15 & 30 & 50\end{array}$ $\begin{array}{llllll}\text { Price, each ... } \$ 2.00 & \$ 2.85 & \$ 3.25 & \$ 4.25 & \$ 6.00\end{array}$

# FERTILIZERS 

Acid Phosphate. ( 16 per cent.) For all vegetable crops, grains, grass, etc. 5 lbs., 20 c .; 10 lbs., 35 c .; $25 \mathrm{lbs} ., 75 \mathrm{c}$.; $\mathbf{5 0} \mathrm{lbs} ., \$ 1.20 ; 100 \mathrm{lbs} ., \$ 2.00$; sack of $200 \mathrm{lbs} ., \$ 3.50$.

Ashes, Hard Wood. Apply 1000 lbs. per acre. Indispensable for all crops requiring potash; excellent for mixing with potting soil. For top dressing lawns and grass fields it is applied to best advantage either in very early spring or late fall. 25 lbs., 75 c .; 50 lbs ., $\$ 1.35$; 100 lbs., $\$ 2.25$; 200-1b. bbl., $\$ 4.25$; 1000 lbs., $\$ 19.00$; ton, $\$ 35.00$.

Bacteria, Mulford Culture. For inoculating clovers and other legumes, such as beans, peas and such other plants that have blossoms similar in shape and form to the above named. The application of bacteria to the seed of these legumes when planting practically trebles the nitrogen gathering powers and for this reason we urge all planters to use it. Trial bottle, 35c.; $1 / 4$-acre size, 75 c.; acre size, $\$ 1.50$; 5 -acre size, $\$ 5.00$.


Bone Meal (Extra Fine). This fertilizer we recommend for lawns, rose bushes, grape vines, especially where a moderately slow fertilizer is needed, for the deep rooted shrubbery and where a perfectly safe fertilizer is wanted. $5 \mathrm{lbs} ., 35 \mathrm{c}$.; 10 lbs ., 60 c .; $25 \mathrm{lbs} ., \$ 1.25$; 50 lbs ., $\$ 2.25$; 100 lbs., $\$ 4.00$; 200 lbs.; $\$ 7.50$.

Apply at rate of 1000 lbs . to an acre.

## General Crop Grower

 (Trucker's Favorite). This is a combination brand of fertilizer containing 1 per cent. Ammonia, 8 per cent. Phos. Acid and 1 per cent. Potash. A good all around vegetable fertilizer. $5 \mathrm{lbs} ., 25 \mathrm{c} . ; 10 \mathrm{lbs} ., 40 \mathrm{c}$.; $25 \mathrm{lbs} ., 80 \mathrm{c}$.; $50 \mathrm{lbs} ., \$ 1.50 ; 100 \mathrm{lbs} ., \$ 2.25 ; 200-\mathrm{lb}$. sack, $\$ 4.00$.Complete Animal Base. A high grade mixture for general crops. 200-lb. bag, $\mathbf{\$ 3 . 5 0}$.
Humus is decayed vegetable matter enriched and mellowed
by age. Similar to a heavy leaf mould, it is richer by far, because
of untold years of ripening in Nature's storehouse.
Humus acts on soil much as yeast does in bread, and by its
process of aeration makes a heavy soil light, and likewise adds
body to a light soil. Humus is black in color and rich in the
elements of plant food-namely, nitrogen, phosphoric acid and
potash, while its natural lime content, about 10 per cent., serves
to sweeten the soil.
As a top dressing for lawns and for plants, shrubs, trees and
general gardening Humus is unequalled; not merely as a quick
stimulant, but as a permanent soil builder. For growing ferns,
various bulbs and plants it has no equal.
Humus will absorb several times its own weight in moistures
and release it gradually; thus, when used on lawns, will carry
the grass through periods of drought.

Humus is clean and odorless, and contains no weed seeds. Use it freely. Garden with it generally. One bag of Humus is equal to a load of manure. A trial will convince. $5 \mathrm{lbs} ., 35 \mathrm{c}$.; 10 lbs., 60c.; 25 lbs., $\$ 1.25$; 100 lbs., $\$ 2.00$.

Hydrated Lime. The good qualities of this lime are generally under-estimated, rather than exaggerated. Used for correcting sour ground, to disinfect chicken runs and houses, for whitewashing. Apply one ton per acre. 4-1b. pkg., 18c.; 50 lbs., $\$ 1.15$; 100 lbs., $\$ 1.75$. Larger lots-price on application.

Land Plaster. Very useful for top dressing. Is a good medium for retaining the fluids and ammoniates when mixed with manures. Mixed with Paris Green is used for dusting plants to destroy vermin. 10 lbs ., 40 c .; 25 lbs ., 85 c .; 50 lbs ., $\$ 1.25$; 100 lbs., $\$ 2.00 ; 200$ lbs., $\$ 3.75$.

Plant Food "V-C." Proper fertilization plays a most important part in the production of the necessary food crops This is also true of plants, flowers and lawns.

You may have often wondered why your plants and flowers do not thrive, or your lawn does not look as green or as full as your neighbor's lawn. Perhaps your vegetable garden does not measure up to your expectations. It is very probably due to lack of proper nourishment, for plants need food as well as do human beings.

A trial package of "V-C" Plant Food will give you a most pleasant surprise in the improvement of your plants, grass and vegetables. Small can, 25 c .; large can, $\$ 1.00$; bags, small, 75 c .; medium, $\$ 1.25$; large, $\$ 2.50$.

Potato and Truck Special. Apply 800 to 1000 lbs. per acre. This is a combination fertilizer, acts quickly, good for all crops. 5 lbs., $30 \mathrm{c} . ; 10 \mathrm{lbs} ., 50 \mathrm{c}$.; 25 lbs ., $\$ 1.15$; 50 lbs ., $\$ 1.75 ; 100$ lbs., $\$ 2.75$; 200 lbs., $\$ 5.00$; per ton, $\$ 45.00$.

Nitrate of Soda. A very powerful, but incomplete fertilizer; only recommended to hasten the crop previous to harvesting. Best form to apply is in solution, two or three ounces to one gallon water. $2 \mathbf{1 b s} ., 25 \mathrm{c}$.; 5 lbs ., 45 c .; 10 1bs., 85 c .; 25 lbs., $\$ 1.50$; 50 lbs., $\$ 2.75$; 100 lbs., $\$ 4.75 ; 200$ lbs., $\$ 9.25$.

Sheep Manure. Apply 1000 lbs. per acre. For garden, lawn or greenhouse use, nothing surpasses sheep manure; it is clean and easily handled, besides giving immediate results. Prices, f. o. b. Philadelphia: 5 lbs., 35c.; 10 lbs., 60 c. ; 25 lbs., $\$ 1.25$; 50 lbs., $\$ 2.00 ; 100$ lbs., $\$ 3.50 ; 500$ lbs., $\$ 14.00$.

## Stim-(1)-planT <br> PLANT STIMULANT TABLET

Stim-u-plant. Plant food in tablet form. The most modern, efficient and scientific method of fertilizing all kinds and conditions of growing plants in home garden, orchard, and on farm.

Stim-u-plant is a 26-grain tablet with a guaranteed chemical analysis of 11 per cent. Nitrogen, 12 per cent. Phosphoric Acid and 15 per cent. Potash. No other plant food contains anything like as high an analysis as this. Stim-u-plant Tablets are composed of water soluble materials of great feeding power and of known weight and percentage of plant food.

Stim-u-plant Tablets should be used directly in the soil at the base of the plants or dissolved in water and applied to the soil. Do not spray on the foliage. No matter how rich the soil may be, these wonderful little tablets will help the plants along. Pkg., of 30 tablets, 25 c .; 100 tablets, 75 c .; 1000 tablets, $\$ 3.50$.

Tobacco Stems. For fumigating, mulching and fertilizing. Bbl. sack \$1.25; in large bales at 2c. per lb.

Wheat Fertilizer. For grass and grain crops. Apply 800 lbs. per acre. In 200-lb. bags only. 200 lbs., $\$ 4.50$; 1000 lbs ., $\$ 21.00$; ton, $\$ 40.00$.

## SPRAYERS

## Hand - Compressed Air - Bucket and Barrel

NO. 32 IDEAL SPRAYER


One of the most popular "one man" machines made. All working parts made of brass. Capacity, 15 gallons. Equipped with $121 / 2$ foot, $1 / 2$-inch spray hose, $1 / 4$-inch iron pipe extension, 4 feet long. Fog nozzle and leakless shutoff.

Price, $\$ 26.50$

BRASS AUTO SPRAY No. 25


A continuous fine spray, just the thing for house and garden use.
No. 25-C 1 qt. Tin Pump, brass tank............................... . . $\$ 1.40$ $25-\mathrm{D} 1 / 2$ gal. " " galvanized tank ......................... 1.50 25-E $1 / 2$ " " " brass ".......................... 1.70

MYERS BUCKET PUMP


This is a good quality sprayer, made of heavy brass tubing, has brass ball valves, is double acting. Two sizes of nozzles, 3 ft . of good hose. Patent agitator.

For any kind of spraying or white-washing this pump excels.
Special Price, \$4.50, postpaid

BROWN'S NO. 5 BRASS AUTO SPRAY PUMP


Not mounted on tank with length of hose and strainer. Price, $\$ 5.00$
Galvanized reservoir or knapsack $\qquad$ . . $\$ 3.00$
Extension pipe, brass. .50

One of the latest in knapsack line. Can be used without the reservoir if barrel or bucket is more convenient.

We sell all parts for Brown's Sprayers. Send for booklet giving prices.

## B-D SIFTER

This is an ideal sifter for applying Bug Death dry. It is of the very latest pattern, remarkably effective and distinctly economical. Easy to operate, and gives quick covering to all plants and vines requiring a top application. The price of this
 is 75 cents, postpaid.


The handy Iittle Bug Death sifter. Price 45 cents, postpaid.

BROWN AUTO SPRAYER


It operates by compressed air; safe and efficient; liquid capacity, four gallons; pressure capacity, 40 lbs. No sprayer is sold under broader guarantee for efficiency and durability. They will successfully spray bushes, shrubbery and trees, the latter with the use of extension pipes. The brass tank sprayer is the best as corrosive solutions can be used in it without injuring the same.
No. 9-B Brass Tank with auto spray
$\$ 9.50$
No. 9-D Galvanized Tank with Auto Spray .
6.50


AUTO-POP


AUTO-SPRAY


BRASS-ELBOW

## SPRAY NOZZLES AND FITTINGS

Auto Spray (see cut) ..... $\$ 0.50$
Auto-Pop (see cut) ..... 1.50
Non-Clog Jr. ..... 75
Fembro or Power. ..... 75
Imperial. ..... 40
Graduating Vermorel ..... 75
Bordeaux. ..... 90
Brass Male End Coupling. ..... 30
Brass Female End Coupling. .....  30
Brass Elbow (see cut) ..... 30


Made of heavy tin, nicely painted; hold in reservoir over 1 qt. or 4 tbs. Paris Green; has fan blower; will dust one or two rows fast as operator can walk.
Price, complete, all a ttachments...... $\$ 10.00$

THE FEENEY POWDER DUSTER


An ideal duster for all kinds of insecticide and fungicide to gardens, flowers, shrubs, etc., also used for killing flies, roaches, bugs in homes or in the barns or stables.
Easy to use, easy to work, nothing to get out of order. Positively the best powder duster on the market.

Price, $\$ 1.00,5$ Postpaid


Tin, painted red, a continuous fine spray.

Price, $\$ 1.00$, Postpaid

POWDER SPRAYER


Price, 35c.

HUDSON JUNIOR SPRAYER


The Hudson Junior is unsurpassed for the backyard garden. It is light enough for a boy or girl to handle, yet strong and sturdy enough for any man.
Capacityapproximately $21 / 2$ gallons. No. 140G, price. . . . . . . . . . $\$ 5.40$


No. 197 is simply our bucket sprayer pump set in a barrel and mounted on a truck. Can be removed easily when wanted for use in a bucket. This outfit can be operated by one man. It is recommended for small estates, in public parks, around railroad stations, on chicken farms, etc. No. 197, price, $\$ 26.50$.

HUDSON PERFECTION SPRAYER


For work of any kind requiring a high pressure compressed air sprayer, the Perfection is supreme. It provides an easy and economical means of whitewashing, cold water painting, disinfecting, etc. It is very practical for use around the orchard, barn, or outhouse; on truck farms; in onion, melon and small potato fields; for removing old wall paper, spraying stock dip, etc.
Tank is made with all seams riveted to withstand high pressure. Capacity 4 gallons. Made of either brass or copper-bearing galvanized steel sheets. brass or copper-bearing
Shipping weight 12 pounds.

No. 110-G. Galvanized Tank. Price Each... $\$ 6.50$
No. 110-B. Brass Tank. Price Fach. . . . . . . . . 9.00

## HUDSON TIN SPRAYER



Made of good quality tin; useful for spraying chicken houses, plants, etc. -

One quart.............................................................. $\$ 0.50$
One pint. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 35

POWDER BELLOWS


For dusting any dry powder; use either straight or bent neck.
Price, \$1.50

ARMSTRONG SPRAY PUMP


The Armstrong Spray Pump is not merely a "bucket" pump. It is a Bucket, Barrel, or Knapsack Pump as desired. One man with an Armstrong will actually accomplish more work than three men with an ordinary outfit costing from $\$ 35.00$ to $\$ 50.00$.
Galvanized reservoir or knapsack....
$\$ 4.00$
Not mounted on tank with length of hose and
strainer. Price...
5.75

Extension pipe, brass...

## INSECTICIDES AND FUNGICIDES

## Liquids and Poisons marked (*) are not mailable. Other Insecticides and Fungicides may be sent at Parcel Post rates if you remit the Postage with your order.

Ansecto (Rose Bug Destroyer). Highly effective when used on Rose Bugs, many hard-bodied insects, Red Spider, Mealy Bug and other garden pests. Use 1 part in $30-50$ parts of water. Thorough spraying is essential. Prices: $4 \mathrm{oz} ., \mathbf{3 0 c}$.; pts., \$1.00.

Ant Exterminator (A Repellant). A powder with a repellant odor, effective against ants and crawling insects that infest lawns. Strew so the surface infested will be thoroughly covered. One pound will dress about 300 square feet. Price, $1-1 \mathrm{~b}$. pkg., 35 c .; $5-1 \mathrm{~b}$. bag, $\$ 1.25$.
*Arsenate of Lead (Dry Powder Form). Being the more popular form of this destroyer, owing to its economical ways of being applied (can be used either as dusting powder or diluted in water).
Price, $1 / 2$-lb., 30c.; 1b., 50c.; 5 lbs., $\$ 2.25$; 10 lbs., $\$ 4.00$.
*Arsenate of Lead Paste. Has attained a wide reputation as a reliable and economical insecticide and is particularly destructive to leaf-eating insects.
It is in paste form and should be sprayed in the proportion of 1 ounce to 1 gallon of water. Lb. can, 40c.
*Black Leaf 40. Is a concentrated solution of nicotine sulphate, is used as a safe and effective spray for plant lice; contains 40 per cent. nicotine by weight; can be combined and applied with other insecticides and fungicides. Oz. bottle, 35c.; $1 / 2-1 \mathrm{lb}$. can, $\$ 1.25$; 2 lbs., \$3.50.
*Bordeaux Mixture (Powder). The perfect Dry Bordeaux Mixture Concentrate is ${ }^{\circ}$ a dry powder, no danger of freezing, no freight to pay for water; use 8 pounds to 50 gallons of water. Price, $1 / 2 \mathbf{1 b} ., 25 \mathrm{c}$.; lb., 40c.; 5 lbs., $\$ 1.50$.
*Bug Death. Is a very fine powder, so
 exceptionally tenacious that it does not wash off. If used when the tender shoots come from the ground you never will be bothered, but even if the bugs and worms have got the upper hand, it is not too late by any means to use Bug Death right now, for it will kill any bug or worm that eats the leaf, blossoms, or flower of any plant. It is ideal for use on Potato, Squash, Cucumber, Currant, Gooseberry and Tomato plants and vines; for house plants and "that little vegetable garden" it is unexcelled.

It contains no Arsenic nor Arsenical poison of any name or nature. Does not harm birds, animals or foliage, no matter how freely it is applied. In addition to killing the bugs or germs and preventing blight, it nourishes the plant. Lb. cans, 20c.; 3-1b. pkgs., 50c.; 5-lb. pkgs., 70c.; $121 / 2$ lbs., $\$ 1.40$.

Bordo Lead. (Paste.) Used for the same purposes as dry powder for spraying against mildew and blight. Lb., 40c.

Calcium Arsenate. For spraying and dusting potatoes for bugs and fungus trouble. $1 / 2 \mathrm{lb} ., 20 \mathrm{c}$.; 1b., 40c.
*Cut Worm Killer. The Cut Worm helps to make the cost of living higher. Use the means at hand to destroy this pest and get a good crop from your protected plants. Directions on 1 pound sprinkler boxes. Price, $1 \mathbf{1 b}$. box, 40c.

Fish Oil Soap. An old reliable remedy for spraying against scale and other pests. Can be used in varying proportions dissolved in water. $1 / 2 \mathrm{lb} ., 15 \mathrm{c} . ; 1 \mathrm{lb} ., 25 \mathrm{c} . ; 5-1 \mathrm{~b} . \mathrm{pkg} ., \$ 1.00$.
*Grape Dust. Very efficient in destroying mildews and preventing blights on Roses and Grapes either in green-houses or in the open. 1 lb. can, 30c.; 5 lbs., $\$ 1.00$.
*Hellebore. One of the best insecticides for all around garden use. Destroys almost all leaf and flower-eating insects. Can be applied dry or in powder form. Price, $1 / 2 \mathbf{l b}$., 35 c.; 1b., 60c.
*Lime-Sulphur Solution. A liquid preparation. Our brand stays in suspension perfectly; always ready for use. Directions: For destroying Scale, 1 gallon to 8 gallons of water; for destroying Fungus, 1 gallon to 35 gallons. Price, qt., 55c.; 2 qts., 90c.; gal., $\$ 1.25 ; 5$ gals., $\$ 3.75$.

Lime Sulphur (Dry Powder). Reduces the cost of spraying by fighting three different classes of pests and diseases with the same weapon at the same time.

It is used for the control of San Jose Scale, Oyster Shellback Louse and other Scale Insects; Apple Scab, Peach Leaf Curl and other fungous diseases; Pear Psylla, Leaf Blister Mite and Aphis.

It is put up in air-tight cans, powder form, and will keep indefinitely. Lb. can, 40c.; 5-1b. can, $\$ 1.40 ; 10-1 \mathrm{~b}$. can, $\$ 2.25 ; 25-1 \mathrm{~b}$. can, $\$ 4.75$.
*Paris Green. The old time Potato Bug destroyer. Use care in applying on account of its burning properties. Use 2 pounds to 50 gallons of water or 2 pounds to 100 pounds of Land Plaster. Can use in same proportions with Limoid instead of Land Plaster. Price, $1 / 4$-lb. pkg., 20c.; $1 / 2$-lb., 35c.; lb., 60 c .; 5 lbs., $\$ 2.75$.

*Pyrox, Bowker's. The one best spray for Apples, Potatoes and general purposes against leaf-eating insects and fungous diseases. A most popular combined insecticide and fungicide that sticks to foliage like paint in spite of heavy rains. Mix with cold water and it is ready to use. Lb., 50c.; 5 lbs., $\$ 1.85$; 10 lbs., $\$ 3.25$; 25 lbs., \$6.75.
P. T. B. Para Dichlorabenzine. A successful remedy for Peach Tree Borers. Directions with each package. Per lb. can, 75c.; 5 lbs., $\$ 2.75$.

Scalecide. For dormant spray. Dilute 1 gal. to 15 gals. of water. Spray during Winter or early Spring. 1 qt., 60 c ; 1 gal., $\$ 1.50$.

Slug Shot. A light, composite, fine powder, easily distributed either by duster, bellows, or mixed with water. Thoroughly reliable in killing currant worms, potato bugs, cabbage worms, lice, slugs, sow bugs, etc. Also strongly impregnated with fungicides. Lb. carton, perforated top, 20 c .; 5 lbs., 60 c .

*Melrosine. Kills the troublesome rose bug and other insects by contact. Highly recommended. Pleasant and harmless to use. Dilute with from 20 to 25 parts of water and apply as a fine mist. Directions on the can. Trial size, 50c.; pt., $\$ 1.00$; qt., $\$ 1.75$; $1 / 2$ gal., $\$ 3.25$; gal., $\$ 6.00$.
*Sulphur (Flowers). Price, 1b., 10c.; 10 lbs., 80c.; 25 lbs., \$1.75.
*Sulphur Candles. For fumigating. $1 / 4-1 \mathrm{~b}$. can, 10c.; $1 / 2-1 \mathrm{~b}$. can, 20c.; 1b., 30c.
*Tobacco Dust. Used for dusting delicate plants, especially good for the soft shell pests which infest flowers. Also for all low growing or trailing varieties of vegetables. Price, lb. pkg., 10c.; 5-1b. pkg., 40c.; 10-1b. pkg., 60c. Larger quantities, price on application.

Tobacco Stems. Used for fumigating. Also soaked in water makes a spray. Much used by florists upon tender plants. 5-lb. pkg., 25c.; bbl. sack, $\$ 1.15$; bale, $\$ 2.00$.
*Tree Tanglefoot. An absolute safeguard against all creeping insects on trees. Apply with paddle, making a band around the tree 3 inches wide. Vermin can not get over it. Lb. can, 50c.; $\mathbf{5 - 1 b}$. can, $\$ \mathbf{2 . 4 0}$. See page 67
*Weed Killer. A scientific chemical which kills weeds and grass permanently, quickly, easily, cheaply. Gets down to the deepest root. Kills the weeds for the whole season. Used by thousands of people all over the United States.

One gallon of Weed Killer, diluted with 20 gallons of water and applied with an ordinary sprinkling can, will clean up 600 square feet-and keep it free from weeds for the whole season. 1 qt., 55c.; $1 / 2$ gal., 85 c .; 1 gal., $\$ 1.35 ; 5$ gals., $\$ 6.50$.

## ROSE SPRAY

## A REMARKABLE NEW DISCOVERY

## FUNGICIDE

Destroys mildew in 24 hours.
Controls Black Spot or other fungous diseases. Does not disfigure foliage or petals.
Does not precipitate to the bottom of sprayer. Does not clog sprayer.

FUNGTROGEN
Does not harden.
Keeps indefinitely.
Acts as an auxiliary fertilizer, promoting growth.
Discourages green lice and ants.
Carries its own spreader.

Price: Pints, $\$ 1.25$; quarts, $\$ 2.00$.
(2) DOG AND PUPPY FOODS,

## DOG AND PUPPY FOODS

Fibo, (for Puppies or Growing
 Dogs.) For shy feeders or those recovering from sickness, or as a change of food at any time for all dogs. Per Carton, 40c.

Old Grist Mill Puppy Bread. Per Carton, 20c., 35c.

Milk Bone Puppy Biscuits. Per Carton, 18c., 35c.

Spratt's Cod Liver Oil Cakes. Per Carton, 40c.
For conditioning dogs or building up "run down" dogs.
Ovals. For puppies or growing dogs. A new meat biscuit (oval shape) of superior quality for dogs of all breeds and sizes. Per Carton, 40c.

Milk Bone Dog Biscuits. Per Carton, 18c., 35c.

Old Grist Mill Dog Bread. Per Carton, 20c., 35c.

"Spratt's" Meat "Fibrine" Vegetable Dog Cakes. The standard dog food. Used at the leading kennels and dog shows throughout the world. A staple and constant food for all breeds of dogs. Per Carton, 35c.

## "Spratt's" "Spratt's" Puppy Biscuits, the

 Standard Puppy Food. A perfect and whole food for puppies of all breeds. Puppies should be started on these biscuits when about one month old, and they should be continued until such time as their teeth become sound and strong, usually when they are about six months old. Follow directions on each package. Per Carton, 35c.
## SERGEANT'S DOG MEDICINES

Sergeant's Distemper Medicine. For treating Distemper in pups and dogs. .$\$ 1.20$
Sergeant's Mange Medicine. For treating skin and blood diseases, such as Mange, Eczema, etc., in pups and dogs....65c.

Sergeant's Condition Pills. A tonic and alterative for pups and dogs. Excellent for keeping pups and dogs well. Unequalled for sick ones. 60c.
Sergeant's Sure Shot Capsules. For round worms, pin worms and hookworms in pups of any size, age and breed; also for large and older dogs. Perfectly harmless and sure to get the worms. Does not require castor oil before or after giving...60c.

Sergeant's Sure Shot Liquid. For pups and older dogs. For owners who prefer a liquid vermifuge.

60c.
Sergeant's Tape Worm Medicine. For tape worm in pups and dogs...................................................... 60c.

Sergeant's Arsenic and Iron Pills. A blood purifier. For treating blood and skin diseases in pups and dogs......60c.
Sergeant's Canker Wash. For treating internal and external Ear Canker in pups and dogs.......................60c.
Sergeant's Well Mouth. For treating Sore Mouth and Black Tongue in pups and dogs.................................60c.
Sergeant's Cough Medicine. For Coughs, Colds and Asthma in pups and dogs......................................... 60c.
Sergeant's Rheumatic Pills. For treating Rheumatism and Lumbago in pups and dogs................................60c.
Sergeant's Dog Rub. A splendid liniment for lameness, sore muscles and swollen limbs in pups and dogs............60c.
Sergeant's Eye Wash. For treating eye troubles in pups and dogs.
$6 \theta \mathrm{c}$.
Sergeant's Constipation Capsules. For treating Constipation, Cramps, Coughs and Colds in pups and dogs.... 60c.

Sergeant's Carbolic Tar Soap. A splendid all-purpose soap. For use in treating skin diseases in pups and dogs....25c.

Sergeant's Skip-Flea Soap. A wonderful bath soap for pups and dogs. Will kill fleas, lice and certain other vermin. A pure high-grade soap that soothes the skin and leaves coat soft and fluffy..
.25 c .
Sergeant's Skip-Flea Powder. For fleas and lice on dogs and cats. Will not nauseate and is not injurious. For use also on poultry and for general household purposes against certain insects and bugs.
.25c.



Bird Rape. Some canaries prefer a large proportion of Rape Seed, others less. We supply it separately at the prices following: Lb., 20c.; 5 1bs., 50 c .

Bird Lettuce. A slight sprinkle of this is much relished by canaries and should be given only occasionally, as lettuce contains a slight trace of opium, which is, however, not harmful. Oz., 5c.; 1/4 1b., 10c.; 1b., 25c.

Bird Millet. This is especially well adapted for mixture with canary and rape for feeding canaries, as it gives variety. Lb., 15 c .

Bird Manna (Pep). A preparation discovered by the bird breeders in the Hartz Mountains that keeps canaries in good health and prevents the loss of song. Canaries like it and it makes an elegant treat for them. Per cake, 15c.

Bird Tonic. A reliable medicine for loss of song, asthma or hard breathing, diarrhoea, moulting out of season, and those troubles arising from colds or exposure of cage birds. It is a liquid and is administered in the drinking water. Sick birds will not sing. If your bird has lost its song try this tonic. Full directions on bottle. Price, 25c.

Bird Salve. A salve specially prepared for sore feet; an affliction from which canaries sometimes suffer. A sure cure. Per tin, 25c.

Bird Wash. For use on Canary Birds and all other birds in captivity. An antiseptic, germicide, disinfectant. Non-poisonous. Is efficient in removing mites, lice, etc. Allays itching and stops the bird from pulling its feathers. Is perfectly harmless and greatly improves the health and plumage. Price, 25c.

Canary Louse Powder. For dusting the bird to eliminate lice, etc. Very effective and used in conjunction with our bird wash should keep your birds free of all vermin. Price per 1 oz . sifter cans. Each, 25c.

## DRINKING CUPS

No. S Double point opal cup, (as shown.) Each, 20c.
No. 102 Single point opal cup. Each, 20c.

No. 1913 Opal open cup. Each, 20c.


## FEED CUPS

No. 104 Opal glass cup, covered top. Each, 20c.
No. O Opal Tulip cup, open top. (as shown) Each, 20c.
No. N Opal shield cup, open top.
Each, 20c.
No. 0

## BIRD BATH

No. 1 Medium opal glass bath, 5 inches long. Each, 20c.

Canary (Plain). The canary seed we import is large, Spanish, heavy and free from dust or other impurities. Canary raisers appreciate the fact that it does not pay to feed dusty and fermented seeds. Lb., 25c.; 5 1bs., 75c.
Canary (Mixed). A mixture of canary and bird rape, very beneficial to cage birds, to which may be added any of the seeds enumerated below, at the option of the customer. Lb., 25c.; 5 lbs., 75c.
Hemp. Hemp seed has a tendency to fatten the birds, and should therefore be fed only in small quantities occasionally. Lb. 15c.; 5 lbs., 45c.; larger lots, prices on application.

## Hulled Oats. 5 lbs., 50c.; 10 lbs., 90c.; 25 lbs., $\$ 2.00$.

Maw Seed. Calculated to improve the song of canaries, etc. Also used as a condiment. Per 1b., 20c.
Song Restorer. No lover of the Canary should be without this health and song stimulator. It is a wonderfully invigorating tonic for Canary Birds, Gold Finches, Parrots and most seedeating birds. It is for use in small quantities in connection with the daily food, and supplies elements necessary to healthy bird life. It helps restore to their natural notes, birds which have lost their song from exposure to cold or from excessive moulting. Excellent for breeding birds. Your pet must "feel right" to, sing, and Burnet's Song Restorer helps him to "feel right." If your bird is not doing well or does not sing, the use of just one box will show pleasing results. More healthy, lively birds, more song and better plumage follow its use. Price, 25c.

## SUNDRY SUPPLIES

Bird Nesting. Prepared hair. Per pkg., 10c.
Cuttle Bone. 2 for 5 c .
Cuttle Bone Holders.
Each, 15c.
Cage Mats (Tinned). For round or square cages. Each, 25c.
Perches. Tapered or round wood perches for
brass or Japanned cages (state size when ordering).
Wire Nest
Cage Hooks. Solid 8 inches long and extra heavy. Each, 35c.
Solid 10 inches long and extra heavy. Each, 50c.
Bird Gravel (White Sand). 10c. per pint.


No. 19

## CAGE SPRINGS

No.
19 Duplex brass cage spring (as shown). Each, 30c.

No. 16 Single brass cage spring (as shown). Each, 15c.

No. 140 Single brass spring, same style as No. 16 only extra heavy. Each, 15c.

No. 014 Single brass cage spring (extra large). Each, 25c.


## CANARY CAGES

Our immense stock of canary cages prevents us from cataloging all the different styles and sizes, but we have selected a variety that includes an assortment of small, large, plain and fancy styles.

5000 SERIES
SOLID BRASS - ASSORTED SIZES


No. 5002. Body, $9 \times 6$ inches. Height, $111 / 2$ inches. Price, $\$ 2.25$.

No. 5004. Body, $95 / 8 \times 61 / 2$ inches. Height, $113 / 4$ inches. Price, $\$ 2.75$.

No. 5006. Body, $101 / 8 \times 71 / 8$ inches. Height, $121 / 4$ inches. Price, $\$ 3.50$.

No. 5008. Body, $103 / 4 \times 73 / 4$ inches. Height, $121 / 4$ inches. Price, $\$ 4.25$.

No. 5010. Body, $13 \times 81 / 2$ inches. Height, $14 \frac{1}{4}$ inches. Price, $\$ 5.00$.

We furnish seed guards to prevent seed, etc., from being thrown to the floor. Fits any of the above cages. Price, $\mathbf{\$ 1 . 0 0}$.


No. 2405
Style no. diameter height each $\begin{array}{lllr}2405 & 101^{\prime \prime \prime} & 17^{\prime \prime} & \$ 8.00 \\ 2726 & 11^{\prime \prime} & 18^{\prime \prime} & 8.25\end{array}$

No. 2726 cage is the same as No. 2405 except that No. 2726 has a wired-covered top, whereas No. 2405 has the top covered as illustrated above.

DOME CAGE
Made of Brass Wire with Seed Guard.


STYLE NO.
274
275
276

White Enameled, Brass Top, White Guard style no. diameter height each

| $\mathbf{6 7 4}$ | $10^{\prime \prime}$ | $16^{\prime \prime}$ | $\$ 5.50$ |
| :--- | :--- | :--- | ---: |
| $\mathbf{6 7 5}$ | $11^{\prime \prime}$ | $16^{1 / 2 \prime}$ | $\mathbf{5 . 9 0}$ |
| $\mathbf{6 7 6}$ | $11 \frac{9}{16}$ | $18^{\prime \prime}$ | $\mathbf{6 . 4 0}$ |



No. $1574-\mathrm{M}$
$113 / 8 x 83 / 8$ inches. . . . . . . . . . . . $\$ 9.50$ each
Moulding bottoms, with zinc drawers. Four removable plain glass guards. Square canary cups.


STYLE NO. SIZE
EACH
606-G. $101 / 8 \times 71 / 8$ inches . . . . . . . . . $\$ 7.25$
608-G. $103 / 4 \times 73 / 4$ inches . . . . . . . . . . 8.00
610-G. $113 / 8 x 83 / 8$ inches . . . . . . . . . 8.50
Moulding bottoms, with zinc drawers.
Polished knobs and three perches.
White Enameled, Brass Top, White Guard STYLE No. Size EACH
614-G. $101 / 8 \times 71 / 8$ inches . . . . . . . . . $\$ 5.50$
616-G. $103 / 4 \times 73 / 4$ inches . . . . . . . . . 6.25
618-G. $113 / 8 \times 83 / 8$ inches. . . . . . . . . 7.75


No. $1654-\mathrm{M}$
$113 / 8 x 83 / 8$ inches (as shown) . . $\$ 11.75$ each
Moulding bottom, with zinc drawer. Four removable decorated glass guards. Square canary cups. Five perches.

## OUTSIDE BIRD BATH

A bird's bath tub that is attached to the outside of the cage, thereby preventing the soiling of the cage.

An attachment that is indispensable once it is used.

Fits any Canary Cage.
$4 \times 4 \times 31 / 2$ inches
. $\$ 0.75$ each



## THE CARE OF GOLD FISH AND THE AQUARIUM

While a well-regulated aquarium attracts the attention of all there is constant inquiry as to its proper management.

While it is not possible to formulate in detail, rules applicable to all cases, some general suggestions intelligently followed will aid in solving the problem of establishing and maintaining healthful conditions. The essentials are-Sufficient Room, Pure Water, Proper Feeding.

Have the aquarium sufficiently large to amply care for the fish. For a three-inch fish, under good conditions, one gallon of water will suffice, but more is safer. No rule except that of ample room will invariably apply. Requirements change with the temperature of the water, weather and other conditions.

The water must be pure and sweet. This does not mean that it must be constantly changed. Quite the reverse, it should not be necessary to change it at all. If the aquarium is not overcrowded with fish and has growing in it a sufficient quantity of proper aquatic plant, and receives good air and light,-some,
but not too much sunlight-with tadpoles and snails as scavengers, and proper care is used in feeding, the water should remain pure and sweet indefinitely. Should it, however, become impure, it must be changed.

In changing care must be used to have the water into which the fish are put about the same temperature as that from which they are taken, as sudden change may kill the fish.

Do not overfeed-The fish, being confined, cannot escape the poison of decaying unconsumed food. Feed every day, but only such quantity as will be eaten. Fish will eat a variety of foods, yet in the aquarium they should be fed only foods prepared for the purpose.

Healthful fish, plenty of room, pure water, sufficient aquatic plant, proper feeding and good judgment, will mean a correctly balanced aquarium, a constant and inexpensive source of interest and pleasure.

## GOLD FISH VARIETIES

|  | Small | Medium | Large |
| :---: | :---: | :---: | :---: |
| Plain Goldfish | . 10 | . 15 | . 25 |
| Japanese Comets. | . 25 | . 50 | . 75 |
| Japanese Fantails. | . 35 | . 50 | 1.00 |
| Shubunkins. | . 25 | . 75 | 1.00 |
| Chinese Telescopes. | . 35 | . 60 | 1.00 |
| Calico Telescopes.. | . 35 | . 75 | 1.50 |
| Chinese Moors.. | . 40 | . 75 | 1.50 |
| Celestial Telescopes. | . 40 | . 90 |  |
| Lionheads. | . 50 | 1.00 | 2.00 |
| Black Banded Sun Fish. | . 35 | . 50 |  |
| Pond Goldfish . | - | . 75 | 1.50 | Extra charge for shipping cans, 35c each

## TROPICAL TOY FISH <br> Furnished on orders only.

Per Pair
Indian Paradise . $\$ 1.50$

Channa Fasciatus 2.50

Mouthbreeders. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.50
Guppies... . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 75
Red Hybrids. 2.00

Cichlasoma Nigrofaciata (Jack Dempsey) ................ 2.00
Chanchito. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3.00
Moon Fish (According to size and color), Price upon application.

Extra charge for shipping cans, 35 c each
SGAVENGERS
Each


## FISH FOODS

Wafer Fish Food-This is an imported white wafer cereal fish food. Each wafer is $234^{\prime \prime} \times 31 / 2^{\prime \prime}$ and is as thick as blotting paper. Put up in neat cartons with directions. Price per carton, 10c.

Natural Fish Food-This is a granular food made from pure vegetable matter in pinhead-sized kernels. Will keep your fish in a healthy condition if fed to them once a day at a regular hour and only what they will eat. Packed in tin boxes. Price per tin, 15c.

Ant Eggs-We supply only the best and largest Ant Eggs obtainable, always fresh, clean and free from foreign matter. Can be fed to your fish alone or ground and mixed with other foods. If fed once or twice a week will keep your fish in fine condition. Put up in neat cartons with directions. Price per carton, 20 c .

Dried Shrimp-Genuine imported Japanese shrimp fish food for all aquarium fish. Fish relish it greatly and thrive upon it wonderfully. Prepared with great care and packed in tin boxes. Price per tin, 25c.

Tropical Fish Food-A combination of carefully-selected foodstuffs suitable for Tropical fish, containing many of the insects, etc., found in their native haunts and of which they are so fond. Prepared with great care under sanitary conditions. Contains nothing injurious to the fish and if fed to them properly will answer all their needs except water. Packed in tin boxes. Price per tin, 25c.

## ACCESSORIES

Aquarium Cement, in 1-lb. tins............ . Price per 1b., 35c. White Fish Sand in 1 pt. boxes............. . . Price per pt., 10c. Aquarium Pebbles, in 1 pt . hoxes. . . . . . . . . . Price per pt., 10 c . Fish Nets...............Small, 35c. each; Large, 50c. each


## PLANTS

Suitable for Still Water Aquariums
Ancharis Alsinastrum is a very beautiful plant, and care should be taken to use it sparingly, as it grows almost too quickly and needs pruning very often. Fine oxygenator. 15 c . per bunch.

Cabomba Palustris (Washington Grass) and Cabomba Caroliniana are most admirable aquarium plants. They are a bright green color, and grow well all year around. They are fine oxygenators, and Cabomba Palustris is the most beautiful. 10c. per bunch.

## SLATE BOTTOM AQUARIUM



## STYLE A

This Sheet Iron Slate Bottom Aquarium is neat and durable. Enameled in Green.

No. 1. Double thick glass, 7 inches wide, 12 inches long, 9 inches high, capacity $31 / 2$ gallons. Price, each $\$ 3.40$.

No. 2. Double thick glass, 8 inches wide, 16 inches long, 10 inches high, capacity 6 gallons. Price, each $\$ 4.00$.

No. 3. Double thick glass. 10 inches wide, 18 inches long, 12 inches high, capacity 9 gallons. Price, each $\$ 4.50$.

No. 4. Double thick glass, 12 inches wide, 21 inches long, 12 inches high, capacity 12 gallons. Price, each $\$ 5.50$.

No. 5. Double thick glass, 13 inches wide, 24 inches long, 14 inches high, capacity 20 gallons. Price, each $\$ 8.00$.

## STYLE E

This Nickeloid Slate Bottom Aquarium is neat, durable and very attractive.

No. 1. Double thick glass, 7 inches wide, 12 inches long, 9 inches high, capacity $31 / 2$ gallons. Price, each $\$ 4.00$.
No. 2. Double thick glass, 8 inches wide, 16 inches long, 10 inches high, capacity 6 gallons. Price, each $\$ 4.60$.

No. 3. Double thick glass, 10 inches wide, 18 inches long, 12 inches high, capacity 9 gallons. Price, each $\$ 5.50$.

## AQUARIUM ORNAMENTS

We have a large assortment of ornaments suitable for all size aquaria. A few are listed below. Each style in assorted sizes ranging in price from 25 c . to $\$ 2.50$ each.


CASTLE ON ROCK

| NO. | HIGH | EACH |
| :---: | :---: | :---: |
| 605 | $43 / 4$ inches | $\mathbf{\$ 0 . 3 5}$ |

## ARCH CASTLE

| NO. | HIGH | EACH |
| :--- | :---: | ---: |
| 576 | $43 / 4$ inches | $\mathbf{\$ 0 . 3 5}$ |
| $5761 / 2$ | $61 / 2$ inches | $\mathbf{. 6 0}$ |



TRIANGLE CASTLE
NO.
602
603

| HIGH | EACH |
| :---: | ---: |
| 3 inches | $\$ \mathbf{0 . 2 5}$ |
| 4 inches | $\mathbf{. 3 5}$ |

## ROUND GROTTO

|  | HIGH | EACH |
| :--- | :---: | ---: |
| NO. | $33 / 4$ inches | $\mathbf{\$ 0 . 2 5}$ |
| 596 | $41 / 4$ inches | $\mathbf{. 3 5}$ |
| 597 | $51 / 2$ inches | $\mathbf{. 5 0}$ |



| NO. | HIGH | EACH |
| :--- | :--- | ---: |
| $5821 / 2$ | $41 / 2$ inches | $\mathbf{\$ 0 . 5 0}$ |
| 583 | $61 / 4$ inches | $\mathbf{. 7 5}$ |
| 584 | 8 inches | $\mathbf{1 . 1 0}$ |
| 585 | $93 / 4$ inches | $\mathbf{1 . 5 0}$ |

## TRIPLE TOWER

| NO. | HIGH | EACH |
| :--- | :--- | ---: |
| 590 | $51 / 2$ inches | $\mathbf{\$ 0 . 6 0}$ |
| 591 | $61 / 2$ inches | .80 |
| 592 | $8 \quad$ inches | $\mathbf{1 . 2 5}$ |
| 593 | $93 / 4$ inches | $\mathbf{1 . 7 5}$ |



## FISH GLOBES

Round Smooth Bottom
7 inches- $1 / 2$ gallon. ....... $\$ 0.35$
9 inches- 1 gallon........ . . . 85
11 inches-2. gallons. . . . . . . 1.25
12 inches-3 gallons....... 1.65
13 inches-4 gallons....... . 2.25
14 inches-5 gallons....... 3.25



OUR RULE "Absolute freedom from all dirt and foreign matter"

Canada Peas. Most preferable for feeding pigeons, being perfectly round and very small. We are offering especially fine grade. Price upon application.

Charcoal (Granulated). Excellent for young and old chicks, should be kept constantly in reach of all chicks. Prevents sour crop. It is of uniform grade, carefully screened and free from dust. It aids digestion and promotes the health of fowls in every way. Fine, medium, coarse. Pkg., 15c.; sack ( 50 lbs.), $\$ 2.00$.

Chick Feed. (Pratts Baby Chick Food.) A perfect food for young chicks, ducks and turkeys. So ground and bolted that it is mechanically pre-digested. Furnishes the same nutriment, in the same proportion, as the mother hen. Pkg. ( $21 / 2 \mathrm{lbs}$.), 25 c .; pkg. ( $53 / 4 \mathrm{lbs}$.), 50 c .; 10 lbs., 80c.; 25 lbs., $\$ 1.80$.

Chick Scratch. Too much attention cannot be given the quality and preparation of the ingredients of which
 chick feed is made, for, if impure grain is used, the mass soon tends to become mouldy, and the chicks will suffer. We offer only the best. 5 lbs., $\mathbf{3 5 c}$.; 10 lbs., 60 c.; 25 lbs., $\$ 1.25$; 100 lbs., $\$ 4.00$.

Corn (Whole Small Flint). Our flint corn is the best obtainable. It is clean, sweet and free from foreign matter. 5 lbs., 35 c .; 10 lbs., 60 c .


Conkey's Original Buttermilk Starting Feed. Raises husky chicks. A ready prepared Mash for baby chicks and all selffeeding young fowls. This remarkable feed-originated by Conkey and prepared through processes controlled and used exclusively by Conkey is a complete ration -containing all the elements needed for safely starting baby chicks, ducklings, goslings, poults, guineas, pheasants, etc. Pkg. ( $21 / 2 \mathrm{lbs}$.), 25 c .; Pkg. ( 5 lbs .), 45 c .; bag ( 10 lbs. ), 80 c .; bag ( 25 lbs .), $\$ 1.75$.

Grit (Crystal). To aid digestion it is necessary to feed some gritty material. Crystal supplies this want better than any other article known. We supply this in three grades, fine, for small chicks and birds; medium and coarse, for larger
 fowl. Fine, medium, coarse. 5 lbs., 15 c .; sack ( 100 lbs.), $\$ 1.50$.

Growing Mash (Pratts). Prepared especially for properly matured young chicks, after they are ready to have the chick food, and so carry them along to the age when they are ready to feed on the whole grain. Chicks should be given developing food when from eight to ten weeks old. 5 lbs., 40 c .; 10 lbs., 75 c .; 25 lbs ., $\$ 1.50 ; 100 \mathrm{lbs}$., $\$ 4.25$.

Hemp. A healthful feed, noted for its fattening properties. $1 \mathrm{lb} ., 13 \mathrm{c}$.;
5 lbs., 45 c .; 10 lbs., 80 cc .
Laying Mash (Pratts). A feed for chick development. Also an egg-producing feed. Hens fed upon it are laying when others are laying off. Poultry raisers everywhere, some of wide reputation, have enthusiastically given credit to it for phenomenal winnings in egg competitions and in the show rooms. And results are of greatest importance to the average poultryman. 5 lbs., 30 c .; 10 lbs., 50 c .; 25 lbs., $\$ 1.10 ; 100$ lbs., $\$ 4.00$.

Kaffir Corn. Our Kaffir Corn is the white, and the best procurable for feeding purposes. We offer only fresh, recleaned feed, absolutely free from dust or other foreign matter. $10 \mathrm{lbs} .$, 50c.; 25 lbs., \$1.10.

Meat Scraps (Or Poultry Meat). Manufactured for us by a reliable firm. Nothing but pure materials are used, and no deleterious preservatives. Our stock is strictly fresh at all times. It is a great egg producer. 5 lbs., 40c.; 10 lbs., 70c.; sack ( 100 lbs .), $\$ 5.50$.
Oyster Shell (Prepared). Manufactured from shells in a pure condition. The lime contained in the shells assists in the formation of the egg shell and contributes to the general health of the fowls. Fine, medium, coarse. 5 lbs., 15 c .; sack ( 100 lbs.), \$1.50.

Oats. Our stock of this food is extra heavy; fine for sprouting. 5 lbs., 25c.; 10 lbs., 45 c . Larger lots, price upon application.

Pigeon Feed. To meet the requirements of the discriminating pigeon fancier, who may raise birds either on a large or on a small scale, we have prepared, and find ready sale for, the mixtures that will here follow:

No. 1. A mixture of grains most suitable for homers and all fancy birds.

If you want your birds to fly fast, feed No. 1. It is a speed maker; does not contain any corn. 5 lbs., $40 \mathrm{c} . ; 10 \mathrm{lbs} ., 60 \mathrm{c}$.; 25 lbs., $\$ 1.25$; 100 lbs., $\$ 4.50$.
"Special." Is one specially mixed for those who want a feed with corn in the mixture; it is very similar in other respects to No. 1. Fancy birds greatly relish this food. 5 lbs., 40 c .; 10 lbs., 60c.; 25 lbs., $\$ 1.25 ; 100$ lbs., $\$ 4.50$.

"XX" Red Cross Pigeon Health Grit is superior to the other Red Cross brands by reason of its having more concentrated Pure Bone Ash, and tonic properties, and costs more than any other Health Grit to prepare. The analysis of the droppings from the birds fed on the "XX" shows 62 per cent. less waste of protein than that from birds not fed with it, proving conclusively the great waste of food that goes in the droppings that should be used, adding flesh more quickly, giving more vigor and strength to the birds, and a great saving on feed. 5 lbs., 20c.; 100 lbs., $\$ 2.00$.

Scratch Feed. We are the local agents for the largest Western house manufacturing this kind of feed. It is a popular sort and has an immense sale, because of its excellent feeding qualities. 5 lbs., 25 c .; 10 lbs., 45 c .; 25 lbs., $\$ 1.10$; $100 \mathrm{lbs} .$, $\$ 3.15$.

Rice (Broken). Used with other feed, lightens digestion; improves the birds. 5 lbs ., 35 c .; larger lots, price on application.
Rape (Dwarf Essex). Why not plant some of this seed early in the spring? It makes quick growth and is one of the best forage plants known for poultry. Lb., 20c.; larger lots, price on application.
Salt Cat (For Pigeons). A mixture of aromatic herbs and tonic remedies. Sold in compressed brick form. Brick, 20c.

Sunflower (Large and Small). Clean seed and well filled grades. 5 lbs., 75 c .; bushel ( 25 lbs .), price on application.
Tobacco Stems. For making nests for pigeons or poultry. 5 lbs., 25c.; bbl. sack, $\$ 1.25$; bale, $\$ 2.50$.

Vetches (For Pigeons). A most excellent food for pigeons. 10 lbs., $\$ 1.50$.

Wheat (Feeding). The quality of our feeding wheat will be found all than can be desired. $5 \mathrm{lbs} ., 25 \mathrm{c}$.; 10 lbs., 40 c .

## THE NEW 1925 MODEL SOL-HOT BROODER



We are offering in the New Sol-Hot for 1925 to Poultry raisers the Acme of Brooder construction, Safety, Service and Satisfaction.
Great has been the reputation of the Sol-Hot for efficiency and acknowledged leadership in the past. The New Sol-Hot is so superior with its many new added features placing it still further in the lead of all others.

In the many years we have been selling brooders and brooding equipment we feel we have never offered anything so absolutely fire proof, efficient, practical and perfect as the New 1925 model Sol-Hot.

One of the new features is the New Unbreakable Metal Oil Container which not only overcomes the fire risk, but with an oil reservoir of double capacity ( 2 gal.) reduces the operating labor more than two-thirds.

The Flat Top Canopy, another new feature, assists in heat distribution preventing heat from burner beating direct back down on burner and floor, which is the result in cone shape canopies. With the Flat Top the heat is spread out, the natural momentum carries it down to the edge of the canopy while the fresh air continues to enter through the burner, producing a continuous circulation of pure fresh air under canopy.

There are many other new features including the New Improved Automatic Thermostat Oil Control, but space prohibits us from describing them all in detail so we ask you not to buy your Brooder until you have thoroughly investigated the New 1925 Model Sol-Hot. We shall be pleased to send upon request one of our New circulars showing in detail all the new features, or better still, come and see for yourself this new model on display in our store.


Showing Interior

## NOTWITHSTANDING THE NEW ADDED FEATURES THIS YEAR

This is made possible by the big increase in sales and popularity of the Sol-Hot, giving us large production, enabling us to produce the new Model at less cost. We are giving you $25 \%$ more value this season at same cost to you.

34 Inch Sol-Hot Brooder (capacity
250 to 300 chicks).
... $\$ 15.75$
... $\$ 15.75 \quad 500$ chicks)
nch Sol-Hot Brooder (capacity
500 chicks) . . . . . . . . . . . . .
. 18.00
54 Inch Sol-Hot Brooder (capacity
1000 chicks)
$\$ 20.00$
24.50


## NEW IMPROVED BABY SOL-HOT

For brooding small lots of baby chicks the new Model will meet every requirement of the small poultryman. This Brooder was designed for this purpose.

It is a separate and distinct Model from the large Sol-Hot sizes.
It is equipped with same style Heater except has one gallon oil container in place of two. The canopy is extra heavy tin in one piece, packed in one carton or package.
Capacity-100 chicks. Shipping Weight-25 Ibs.
Price- $\$ 10.50$.

## THE INTERNATIONAL SANITARY HOVER



The International Sanitary Hovers have stood every climatic test from Panama to Quebec. Practical poultrymen, state experiment stations and poultry judges indorse them. You can raise chicks anywhere with International Sanitary Hovers. No specially constructed houses are necessary. There is no better place than in your regular hen houses.

Sanitary Hovers are as practical for the small backyard poultry raiser as for the large poultry farms.

The remarkable chick raising results of the International Sanitary Hover are not duplicated by any other method of brooding for the simple reason that the features of the International Sanitary Hover, which give these results, are exclusive patents.

These exclusive features completely eliminate the chick losses that are experienced with an ordinary hover. There is no leg weakness because the warmth comes from above. There is no smothering of chicks, due to impure air, because of the thorough ventilation through the canvas curtain. There is no loss of chicks from colds, because the curtain prevents all draughts. There is no crushing of chicks from crowding, because the circulated warmth keeps the chicks distributed all over the area, and the round construction makes it impossible for chicks to "pack" each other in corners.

There is no loss from lice or vermin because the International is metal throughout, and is circular.

There is no loss from fire, smoke or oil getting into the hover space because the lamp unit is entirely walled away from the chick area.

You want the best brooding device - you will get it in the International Sanitary Hovers.
The International Hover is made in the following sizes:

| NO. | CAPACITY | HOVER DIAM. | PRICE |
| :---: | :---: | :---: | :---: |
| 1 | 100 Chicks | 28 in. | $\$ 15.00$ |
| 2 | 350 Chicks | 42 in. | $\$ 24.00$ |

For full description of this Hover, call or write for descriptive catalog. Mailed free to all who apply.

## QUEEN INCUBATORS



## HATCH CHICKS THAT LIVE AND GROW

Stop hatching weak chicks with cheap incubators. A QuEEN costs but little more, and the extra chicks that live and grow soon pay the difference.

Remember, it is not how many chicks you hatch that counts, but how many you raise. Chicks that hatch out weak and wobbly, and live but a few days, mean nothing to you but trouble and loss. They make one sick of the poultry business.

Most of the chicks you lose in the first few weeks die because they did not have, when hatched, enough strength or vitality for a good start. Queen Incubators are famous the country over for big hatches of strong, healthy chicks that live and grow.

STYLE K INCUBATORS

| NO. | CAPACITY | PRICE |
| :---: | :---: | :---: |
| 20. | 70 eggs. | . \$16.50 |
| 21. | . 130 eggs | 27.50 |
| 22. | . 220 eggs . | 36.75 |

## QUEEN INCUBATORS

| no. | CAPACITY | PRICE |
| :---: | :---: | :---: |
| 1. | 85 eggs. | \$27.50 |
| 2 | . 135 eggs. | 37.50 |
| 3 | . 180 eggs. | 44.50 |
| 4 | . 275 eggs. | 57.50 |
|  | . 400 eggs . | 68.00 |

## MARVEL COAL BROODERS <br> For Efficiency



Whether you operate your own incubators or buy day old chicks, each and every chick represents a value to be conserved, also a value to be converted into real money in the shortest possible space of time through the medium of Broilers, Layers, Eggs, etc. With the Marvel it is possible to have Broilers in Six Weeks. The construction of the Marvel Brooders represents the highest type of excellence.

The grates and fire chambers are designed to produce the greatest heating power from a given quantity of coal.
The Super Automatic Draft and Check Box work in unison with the sensitive Automatic Thermostat, operating at any desired temperature, on a variation of a couple of degrees of heat.
The Marvel is made in the following sizes:

| No. | CAPACITY | DIA. | ${ }^{\text {DIA. }}$ | PRICE |
| :--- | :---: | :---: | :---: | :---: |
| 10 | 500 Chicks | 42 in. | 8 | in. |
| 2621.50 |  |  |  |  |
| 26 | 1000 | Chicks | 52 in. | 11 |
| in. | $\mathbf{2 6 . 5 0}$ |  |  |  |
| 30 | 1500 Chicks | 60 in. | $121 / 2$ in. | $\mathbf{3 2 . 0 0}$ |

## THE PUTNAM BROODER HEATER



This can be used in any home-made brooder. The heater is so constructed that it acts like an open fireplace, carrying the foul air out and drawing the fresh air in, thus providing perfect ventilation automatically. Heat is radiated from above onto the backs of chicks, giving the natural and soothing effect of the hen, without the lice. The brooder heater is made of brass and galvanized iron and is practically indestructible. Every brooder heater is accompanied by easily followed directions for building the home-made brooder. Price of heater, $\$ 4.75$, Postpaid.

## METAL EGG BOX

This is the ideal, indestructible box for forwarding household eggs by parcels post or express; can be used an indefinite number of times.


LOCAL OR PLAIN EGG BOXES

$3 \times 4$ style
Strong [cardboard; all right for local use. Price-dozen, 17c., fifty, 60c.; $100, \$ 1.15$. Parcel post, $\$ 1.35$.

$$
2 \times 6 \text { style }
$$

Made to suit a more exclusive trade, who want áfancy carrier. Extra quality. Price-dozen, 20c.; fifty, 70c.; 100, \$1.30. Parcel post, \$1.45.


The handiest and strongest carrier on the market. It is collapsible and occupies little room when not in use.

| CAPACITY | EACH |
| :---: | :---: |
| 36 eggs, ( 3 doz., ). | \$0.45 |
| 72 eggs, ( 6 doz.p). | 55 |
| 108 eggs, ( 9 doz.,). | . 65 |
| 144 eggs, (12 doz., ). | . 75 |
| 180 eggs, (15 doz.,). | . 85 |



EGG TESTERS Hand Lamp Tester

Can be used on any ordinary lamp; made of tin and felt. 40c.

## NESTING EGGS

China or Opal, per doz., 35c.; 4c. each. Lime, per doz., 60c.; 6c. each.

## WAFER THERMOSTATS

Used in many Incubators and Brooders 3-inch Single. $\$ 0.50$ each 3 -inch Double .75 each .75 each 4 -inch Single. .10 each 4-inch Double 1.00 each 1.50 each

5-inch Single..

PIGEON NESTING BOWLS
Earthen



## ROOT CUTTER



The Banner Root Cutters cut beets, turnips, carrots, onions, potatoes, cabbage, mangels and all other roots and vegetables; they cut fast, fine and are easy running; leaves the feed in fine ribbon-like strips that make choking impossible. The knives are adjustable and are made of the very best of steel. An iron grate in bottom of hoppers lets dirt and gravel escape before reaching the knives.
No. 7-Poultry Size, $\$ 8.25$. No. 1 GRINDING MILL


Price, $\$ 8.00$

Especially made to grind or granulate Dry Bones, Shells, Charcoal, Corn, etc. All grinding surfaces in these mills are extremely hard.


INCUBATOR HYGROMETER


Moisture and ventilation have heretofore been a $m$ atter of guesswork almost entirely, and even the experienced operators cannot always guess right, there being such a great difference in conditions, such as high and low altitude, cold and hot weather. All these conditions make moisture regulation quite difficult unless you have a reliable Hygrometer such as our Tycos Hygrometer. This instrument will work in any incuhator and will give satisfaction. No. 5796--Price, $\$ 1.75$.

Extra silk wicks for above, 15c. each.


THERMOMETERS
We carry a full assortment of tested thermometers, a few of which are listed below. No. 5981-Hot Bed,
$\$ 2.50$
No. 5715-Dairy .75
No. 5740-S-Dairy
Flange. . . . . . . 75
No. 5378-Storm . 75

Household
$8^{\prime \prime}$ Tin Case.... \$0.85 10" " " .... 1.25
$8^{\prime \prime}$ Copper Case 1.50
$10^{\prime \prime}$
$8^{\prime \prime}$ Wood Back
$10^{\prime \prime}$

Hover.


Household.

## POULTRY BANDS

## "VICTOR"



Aluminum Leg Bands. In colors with printed numbers.

Victor Bands combine beauty, safety, durability, comfort, convenience and high visibility.
Five bright colors-Red, White, Blue, Green and Yellow.
Made of aluminum with celluloid number plate. Smooth finish, cannot injure leg. Large size. Light weight. A combination which insures comfort. A safe band, easily put on and will stay on. Adjustable to any size leg. Suitable for any breed.
Prices, 12 for 50 c ., $25-\$ 1.00,50$ $\$ 2.00,100-\$ 3.75,200-\$ 7.25$. Victor sealed bands, 4c. each, postpaid.


## "SPIR-OL"

## Celluloid Leg Bands

The most popular Band for poultry; made in ten distinct shades and colors: Light Blue, Pink, Amber, Black, Red, White,Green, Dark Blue, Yellow, Transparent Orange.
Asiatic: Doz., 18c.; 100, \$1.00; 1000, \$8.00.
American, Mediterranean and Bantam: Doz., $15 \mathrm{c} . ; 100,75 \mathrm{c}$. ; 1000, $\$ 6.50$.
Pigeon and Baby Chick: Doz., 10c.; $100,65 \mathrm{c}$. ; 1000, $\$ 4.25$, post paid.


Prices: 25 for 25 c.; 50 for 45 c.; 80c. per 100; per'1000, $\$ 7.00$, postpaid.

## DOUBLE CLINCH BAND



This is a popular aluminum leg bànd with Raised Figures and can be supplied in consecutive numbers as desired. It is easily attached and when in place cannot be lost off in continuous wear. The band is made of heavy aluminum with smooth edges. It cannot injure the leg. Hundreds of progressive poultrymen have used this Favorite Leg Band for many seasons and have found it entirely satisfactory for pedigree and egg record work. This band locks with a double clinch and cannot shake or wear loose.
Prices-25 for 40 c .; $50-75 \mathrm{c}$.; $100-\$ 1.25$; $250-\$ 2.75 ; 500-\$ 5.00$, postpaid.

COLOROID ACME BANDS
(For Pigeons Only)


In this band we have a most desirable marker, with numbers from 1 to 1,000 in large figures placed in the center of the band, which is one-half inch in the center of the band, which is one-half inch
wide. Always big black numbers on white. wide. Always big black numbers on white.
Made in the following twelve colors: red, dark blue, dark green, light green, pink, black, white, orange, yellow, brown, gray, purple.
Prices: 12 ( 6 pairs), 25c.; 24 ( 12 pairs), 50c.; 50 ( 25 pairs), $\$ 1.00 ; 100$ ( 50 pairs), $\$ 2.00$, postpaid.

## POULTRY MARKERS

These will be found very useful for marking poultry, which is done in the web of the foot. A perfectly painless operation, and you can always identify your fowls. We carry in stock all approved makes.


A new improved Punch. Works easily, cuts clean, and does not pinch the foot. Nickel plated.
Ideal Poultry Punch

## . Each, 50c.



A popular and practical Punch. Makes a clean perforation and does not bruise the foot.
Perfect Poultry Punch. . . . . Each, 25c. DUPLEX MARKER Two Sizes in One


The cutting part is made of steel and the entiremarker plated.
Price, 25c., Postpaid
KILLING KNIVES
The use of a practical knife in killing poultry will be found to be a more humane and satisfactory method of slaughtering.


Mingle's Swift Sure, 50c.


Progressive, 50c., Postpaid
The quickest and most humane manner of killing poultry and squabs.

GAPE WORM EXTRACTOR

## $\Longrightarrow$ OES

Price, 50c., Postpaid

## POULTRY NETTING

Best quality silver-finished wire. Galvanized after woven.

## No. 20

1 in. mesh 150 running ft . to the bale.

2 in. mesh 150 run-

| Per bale |  |  | Per bale |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 in . | wide | \$4.00 | 12 in. | wide | \$2.25 |
| 18 " | " | 5.75 | 18 " |  | 2.90 |
| 24 " | " | 7.00 | 24 " |  | 3.75 |
| 30 " | " | 8.00 | 30 " | " | 4.15 |
| 36 | " | 9.00 | 36 " | " | 5.00 |
| 42 " | " | 10.50 | 42 ، | " | 5.50 |
| 48 " | " | 12.00 | 48 " | " | 6.50 |
| 60 " | " | 13.50 | 60 " | " | 7.75 |
| 72 " | " | 16.00 | 72 " |  | 9.25 |

DROPPING BOARD SCRAPER

3/4 inch. . . . . . . . . . . . . . . . . . . 15c per lb.

Price, $\$ 1.25$.

BLACK HAWK GRIST MILL
Price, \$5.25.
Weight, 17 lbs.

Bolts to table or bench. A good machine; grinds fine or coarse any kind of cereal. All bearings are chilled.

OHIO OR BANNER FODDER CUTTER


Has 11 in . oil-tempered steel knife; possesses adjustment to take up wear. Can be set to cut any length desired. Shipped knocked down. Weight, 50 lbs. Price, $\$ 9.00$.

## PILLING CAPONIZING SETS

The operation of caponizing is very simple and is easily performed with the instruments contained in these caponizing sets. The instructions sent with each are so complete and explicit that any person, after a careful reading of same, will be able to perform the operation.

Pilling's Lansdowne (as illustrated).
Farmers
Each
Farmers
3.50
3.00



Philadelphia.
3.00
2.50

# DRINKING FOUNTAINS AND FEEDERS 

## DUPLEX FOUNTAINS



The latest and most practical sanitary poultry fountain on the market. This is a double fount, easy to fill, and keeps the water clean and pure. Made in two sizes. Price, 1-gallon size, \$1.15; 2-gallon size, $\$ 1.40$.

## MASON JAR CHICK FOUNT



This appliance for chicks, feeds water automatically. It is an absolutely sanitary fountain made to fit any half-gallon, quart or pint Mason jar. Jars not furnished.

Price, 15c. each

## PEERLESS FOUNTAINS



A heavy galvanized fountain made in two parts. The water is always pure. It is protected from dirt and filth. Easily cleaned by removing the bottom. The fowls cannot injure their combs when drinking. Simple in construction, durable and practical, can be hung up on a hook out of the dirt. Positively will not burst when frozen. Made in three sizes.
Price: 1-quart size, 40c.; 5-quart size, $\$ 1.00$; 10-quart size, \$1.30.

The Peerless Fountain for winter use may be used in connection with the Peerless Heater. The combination when in use should be set against the wall and attached to it by either backstrap or bail on fountain; then it cannot be tipped over by the fowl and is absolutely safe.

GRIT AND SHELL BOXES

Baby Chick Size


A special feed hopper and grit box for baby chicks. Thoroughly well made, no solder used in chicks. Thoroug
its construction.
ts construction.

No. 1. $10^{\prime \prime}$ long. 12 holes. $\qquad$ . Each, 25c
No. 2. $18^{\prime \prime}$ long. 20 holes.
No. 3. $24^{\prime \prime}$ long. 30 holes. Each, 40c. Each, 60c.

## THE PEERLESS HEATER

The base is an oil well. Holds one pint kerosene. Will last one week (day times). An air space between oil well and heat chamber makes it impossible for gas to form. In this heat chamber is a small burner connected to oil well by brass pipe. Around the burner is a circular shield; this protects the light and concentrates the heat to a small-space on fount; in that way it never overheats the water. Inside, next outside wall is a wire gauze that prevents anything from being scratched into the heater. It is so ventilated that the light receives just the right amount of oxygen to burn smooth without smoke. It is impossible to get the outside wall of heater warm.
Price .
Each, \$2.00

## LITTLE PUTNAM STOVE



Holds 3 pints of oil. Will keep drinking water at exactly the right temperature. One of these stoves will keep enough water unfrozen even in the coldest weather for 30 to 40 fowls. You will be surprised how much water your birds will drink when kept at the right temperature.

Price................................. . $\$ 2.50$


## AUTOMATIC SELF-HEATING POULTRY FOUNTAINS AND HEATERS

Keeps water at Right temperature in coldest weather. Requires Less than a quar ${ }^{+}$of oil a week. Will last years. Thousands in use. Every Hen Thousands in use. Every Hen House needs one. In warm weather use AUTOMATIC FOUNTAIN without heater. Water Always clean. Chicks can't drown. Fountains and Heaters complete. 2 gal., $\$ 2.25 ; 3$ gal., $\$ 3.00 ; 4$ gal., $\$ 3.50$.

## KEYSTONE FOUNTAINS

Turn the Fountain upside down, unhook the hinged bottom, and the whole Fountain is quickly emptied, cleaned and filled.

There is no obstruction of any kind on the inside. This is important when removing ice, and freezing does not injure it.

It is so huilt that it stands firmly upright while being filled.
A strong and durable metal ear, and the "Everlast" bracket make it convenient to hang the Fountain above the ground.

Made in the following sizes: 1 qt., $50 \mathrm{c} . ; 2 \mathrm{qt.}, \mathrm{75c.;} 1$ gallon, $\$ 1.00$, 2 gallons, $\$ 1.40$.

## NORWICH AUTOMATIC AIRLOCK FOUNTAIN



The most perfect device ever placed on the market for automatically supplying pure, fresh water in the poultry house. It is absolutely impossible to contaminate or pollute the water supply, and requires cleaning only about once in three months. Guaranteed frost-proof to 10 degrees below zero, and has been operated at temperatures of 15 and 20 below without being affected. Fitted with detachable cup, removable oil chamber, heat generator, etc.

Made in one size only, 5-gallon capacity. Shipping weight, 15 lbs .
Complete, with burner base. .
$\$ 6.00$
Without burner base.............. . . 3.50
Burner base only.
3.50

## HANDY DRY MASH HOPPER



Years of experience with this type of Hopper, with changes from time to time to improve it, has enabled us to put on the market a Dry-Mash Hopper that fulfils every need. The wire grid is raised or lowered as required for coarse or fine mash. The curved bottom of the hopper always keeps the feed within easy reach of the birds. The flange at the edge prevents any possibility of waste, and the small wires extending from the flange to the wire grid prevents the birds from throwing the feed sidewise out of the hopper. The most distinctive feature about this Handy Dry-Mash Hopper is the fact that it is an inch wider at the lower side than at the top, thus making it utterly impossible for the food to clog.
12-inch, 12-quart-Price ..... \$1.75
18-inch, 18-quart-Price. ..... 2.25
24-inch, 24-quart-Price. ..... 2.50

## 1-2-3 POULTRY FEEDER



Having a perfectly straight front, the feed positively cannot clog. There is a lip in front to prevent fowls from wasting the feed. When used for one kind of feed only take out separator; for two kinds put separator in one end; when used for three kinds, say scraps, shells and grit, put separator in the middle and you have three separate feeders. Can be set on floor or hung on wall. Has handle, or bail, for carrying. A big value for the money. Price 75c., Postpaid.

## LARGE SIZE

For dry mash, scraps, shells, grit, charcoal or any poultry feed. Price, \$1.35.

## ROUND GHICK FEEDER


$r$ Has sliding top, center of feeder is raised. All food slides to the holes, around edge of feeder. Made in two sizes only.
No. 12-12 hole . . . . . . . . . . . . . . . . . . 25c.
No. 11- 8 hole . . . . . . . . . . . . . . . . . . 15c.
HENS' NESTS


Heavy steel coppered wire. These nests are intended to be fastened with screws or screw hooks-if wanted removable. They afford no place for vermin and allow the air to circulate freely, advantages not obtained when wooden boxes are used. They are intended to be filled with straw. They are durable, sanitary, easily cleaned, convenient to handle and inexpensive. Each, 20c.; dozen, $\$ 2.00$.

## COLLINS OAT SPROUTER

Whether you keep a few birds in the back yard or run a big commercial plant, you want eggs during the Winter months. And, to get eggs at that time you must make conditions like those of Springtime, when the hens lay naturally. In the Spring, there is always plenty of fresh green grass. But you can furaish which is quite as palatahle and even more nourishing. Sprouted oats will "'make the hens sing" in zero weather.
It Will Save Grain and That Means a Lót These Days
In a Collins Sprouter, the hursting oat grains draw on the water and air for nourishment and comhine these elements into wholesome nourishing green feed that will make your grain go $200 \%$ green feed that will make your grain go
farther than when fed in the ordinary way.

8 Pans $11 \mathrm{x} 15-$ the Popular Size... $\$ 4.00 \quad 14$ lhs. 5 Pans $11 \times 15$, Small Back Yard

Flock.......................... 3.00
14 lhs.
8 Pans $11 \times 32$-for BIG Business... 8.00
9 lhs.
28 lhs.

## WATER AND FEED CUP

Holds about one
 pint and hangs straight when applied to the coop. Can be attached to any exhibition coop.

Price, 18 cents each.

## TRAP NEST FRONT

We have added this useful device to meet a popular demand. Easily attached to any square box. Works like a charm.

Price, 50c.
Postpaid.


MINGLE'S ROUND HOPPER


This hopper is very popular with pigeon breeders, and is equally good for young chicks; made of finest grade galvanized steel; possesses eight sub-divisions (only four shown in cut); a neat, practical waste-proof hopper; holds 12 lbs. feed; movable or sliding hood. Prlce. $\$ 2.00$.


This appliance for chicks, feeds water or feed automatically. Made of best galvanized steel. Fits all sizes of glass jars. Price, 15c. each, postpaid.

## TWO PEN DUPLEX FOUNTAIN



This Fountain will serve two pens at same time, gives good results and saves labor. Top section slides into bottom section. Made in two sizes: 8 -quart and 5 -gallon. Price, 8 -quart size, $\$ 1.65$; 5-gallon size, $\$ 3.25$ each, postpaid.

## TWIN DUPLEX FOUNTAIN



A new Duplex Fountain constructed with two water fronts. Doubles the drinking capacity. Top section slides into bottom section, Made in two sizes: 8 -quart and 5 -gallon. Price, 8 -quart size, $\$ 1.65$; 5 -gallon size, $\$ 3.25$ each, postpaid.

## NORWICH CHICK FEEDER



Convex in shape, it is impossible for the chicks to pull out or scatter the feed; the removable guard rod prevents the chicks from getting into the feed. The body is of galvanized steel with ends riveted and burred to malleable iron brackets. Will last a lifetime with ordinary care. 20 -inch. Weight, 3 pounds.

Without Rain Top, 75c. each. With Rain Top, $\$ 1.00$ each.


## ONE-GALLON ALL GALVANIZED FOUNT

To Fill-Pull top off base and turn can upside down and fill. Push base on and invert. The pressure of the air, together with grooves in pan, holds the weight of the water and fount may be carried by the handle on top without fear of spilling contents. Price, 60c. each, postpaid.

## THREE-GALLON FOUNTAIN

All Galvanized Iron Chicken Fount. Can be used for dispensing water or feed. An ideal article. Cannot be overturned.
Price, \$1.20 each, postpaid.


## OAT SPROUTER

Made entirely of metal. Strong and rigid.
Provides the very necessary green feed at all seasons. Healthy chickens and more eggs.

The frame is of steel, well braced and neatly painted. Has six heavy galvanized iron pans. Five of the pans have perforated bottoms to secure the proper drainage, and the bottom pan is solid to hold the drippings. Pans are interchangeable. Sectional frame can be quickly taken apart and stored in a small space.

Total height of frame 3 ft . Size of pans 16 -in. by 18 -in. Packed knocked down 1 in a crate. Shipping weight 25 lbs.

Price, $\$ 6.00$ each.


## EGGS FOR HATCHING

We can furnish eggs for hatching from either exhibition or finest utility strains.
Exhibition stock a matter of correspondence.
Guarantee of fertility does not mean every egg must hatch; conditions beyond control prevent such results very often. We assure you, however, 60 per cent. in early settings (January, February and March); $\mathbf{7 0}$ per cent. in balance of season. All claims of infertility must be accompanied by affidavit.


## CHICKEN EGGS

Price per setting of 15 eggs
Barred Plymouth Rocks . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.50$
White Plymouth Rocks. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.50
White Wyandottes . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.50
Single Comb Black Minorcas. . . . . . . . . . . . . . . . . . . . . . . . . . . 1.95
Single Comb Brown Leghorns. . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.95
Rose Comb Brown Leghorns . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.95
Single Comb Buff Leghorns . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.95
Buff Orpingtons . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.25
White Orpingtons. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.25
Single Comb White Leghorns. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1.50
Single Comb Rhode Island Reds. . . . . . . . . . . . . . . . . . . . . . . . 1.50
Rose Comb Rhode Island Reds. . . . . . . . . . . . . . . . . . . . . . . . . 1.50
TURKEY EGGS
Price per setting of 11 eggs
Mammoth Bronze. ..... $\$ 5.50$
White Holland ..... 6.00
DUCK EGGS
Price per setting of 13 egge
Imperial Pekin .....  22.50
White Indian Runner . ..... 2.00
GEESE EGGS
Price per setting of 7 egge
Hong-Kong or Chinese .....  $\$ 3.00$
Tonlouse. ..... 3.00

## The Original

"Baby Food For Baby Chicks"



Conkey's Baby Chick Food, perfected through years of painstaking work and at great expense, raises most every worth-while chick. Not only does it prevent many deaths, but it gives the chicks that strong start which makes it a simple matter to carry them to profitable maturity.

Conkey's is the original "baby food for baby chicks." It is original with us, unique in composition and manufacturing process, different from and vastly superior to any other special food for baby chicks. It is all the chicks need the first eight weeks except greens, charcoal, grit, clean water and some fine scratch grains in the litter for exercise. Give grit and water from the start. During the second week add green stuff and in the fourth week finely cracked chick grains. Pkg. ( $21 / 2 \mathrm{lbs}$.), 25c.; pkg. ( 5 lbs.), 45c.; pkg. ( 10 lbs.), 80c.; pkg. ( 25 lbs.), \$1.75; sack ( 100 lbs.$), \$ 6.00$.

## BABY CHICKS

Our Baby Chicks are noted for their strong constitution and produce layers of the highest class.

We are prepared to take your order and fill it when you want your chicks from fine laying strains; from the popular breeds.


## PRICES BABY CHICKS-Postpaid <br> February, March and April delivery

|  | Per 25 | Per 50 | Per 100 |
| :---: | :---: | :---: | :---: |
| White Legho | \$5.50 | \$10.00 | \$19.00 |
| Black Leghorns. | 6.00 | 11.00 | 21.00 |
| Brown Leghorns | 5.50 | 10.00 | 19.00 |
| Buff Leghorns. | 6.00 | 11.00 | 21.00 |
| Barred Rocks. | 6.00 | 11.00 | 21.00 |
| Buff Rocks. | 6.25 | 12.00 | 23.00 |
| White Rocks | 6.00 | 11.00 | 21.00 |
| White Wyandott | 6.00 | 11.00 | 21.00 |
| Anconas... | 5.50 | 10.00 | 19.00 |
| Black Minorcas | 6.00 | 11.00 | 21.00 |
| Rhode Island Red | 6.00 | 11.00 | 21.00 |

Rhode Island Reds..................... $6.00 \quad 11.00 \quad 21.00$ May delivery, 2c. per chick less; June, July and August delivery, 2c. per chick less than May.
Prices subject to change without notice.

## OUR GUARANTEE

We ship day-old chicks to any point in the United States east of the Mississippi River.
All chicks will be sent by Prepaid Parcel Post unless ordered by express, which will be collect.
We guarantee 100 per cent. safe delivery of all chicks sent by parcel post. Express shipments at buyer's risk.
If 100 per cent. of the chicks you receive are not in A-1 condition a statement signed by your postmaster will bring a prompt adjustment.

Order early. For 10 cents extra you can have your chicks sent special delivery. Chicks cannot be sent C. O. D.


AMERICAN HORSE TONIC-We recommend American Horse Tonic as a general improver for horses. Hundreds of users tell us that horses look better, feel better, act livelier, are full of snap and ginger when they are given it. Besides this, we recommend it as a Worm Expeller, for Lost Appetite, Rough Hair, Coughs, Inflammation of Lungs and Bowels, Stoppage of Water, Recent Founders, Distemper, etc. Small pkg., 35c.; large pkg., 70c.

ANIMAL REGULATOR-More work out of your horses, more milk from your cows, fatter hogs-these are a few of the benefits which come from using Pratts Animal Regulator.
Always sold on a guarantee that it will satisfy you or money back.

25-1b. pails, $\$ 3.40$, are popular with our customers. Pkgs., at 25c., 50c. and $\$ 1.00$.

BAG BALM-We recommend Bag Balm for all diseases of udder and teats; Caked Bag, Sore Teats, Bunches, Chapping, Cuts, Inflammation, etc. It makes easy milkers of hard ones, keeps all the parts in a sanitary, healthful condition. Per box, 65c.

BLACKHEAD REMEDY - Turkey breeders should have a package on hand as black head is deadly in advanced stages. Should be given regularly to growing poults. Pkgs., 50c.
BRONCHITIS TABLETS-Bronchitis in poultry is fatal in a few days unless promptly checked with Pratts Bronchitis Tablets.
This is safe and quick and will usually save your birds. Improvement is almost immediate, the suffering being relieved in a short time. This remedy is put up in tablet form so that individual treatment can be given when desired. Pkgs., 25c. and 50c.; 30c. and 55c., postpaid.


CARBOLA-Disinfecting germ-killing White Paint. Use it instead of whitewash. A white paint and a non-poisonous disinfectant combined in a powder form. Ready as soon as mixed with water. Applied with brush or spray pump. Kills lice, mites, fly eggs, etc., and is a preventive of contagious disease. Recommended for poultry houses, stables, cellars, hog pens, dairies, etc. Satisfaction guaranteed. 5-1b. pkg., 75c.; 10-1b. pkg., \$1.25.

CANKER AND BRONCHITLS REMEDY This splendid remedy checks cankerous growths and sores and soon restores the bird to normal. This remedy is Conkey's Specific for Bronchitis. Also desirable in treating individual cases of Roup and for use at shows for colds. Pkg., 50c., postpaid.
CHOLERA REMEDY - So-called Cholera, bowel troubles, indigestion, diarrhea and kindred ailments often kill a whole flock in a few days. Diarrhea, a drowsy, listless appearance and great thirst-these are the signals toput Conkey's Cholera Remedy in the drinking water. Pkgs., 25c., 50c., \$1.00, all postpaid.


CONDITION TABLETS-Heavy laying hens frequently get into a ", run-down" condition. For a quick "bracer" to put them back into form we recommend Pratts Condition Tablets.

Don't get the idea these tablets are for show birds only, just because they are extensively used by fanciers to keep their exhibition stock in the pink of condition. They are for utility birds as well. Will put flesh on the birds. Help prevent colds, roup and liver troubles. Pkgs., 25c. and 50c.
FER-SUL-Kills germ diseases, lice, mites, nits, etc.; is a tonic. Available everywhere on the farm as a Disinfectant, Antiseptic and Deodorizer. For poultry houses, cow barns, pig styes, etc. Invaluable as a flank and udder wash. Recommended by the highest authorities in animal and poultry husbandry. Cures Roup, Canker, Chicken Pox, Gapes and White Diarrhoea. Price, 12-oz. bottle, 75 c .; qt. bottle, $\$ 1.25$; gallon, $\$ 3.00$. Not mailable.

FLY SPRAY-Is an Insecticide, Germicide. It is nonpoisonous and may be used with safety and effectiveness on cattle, horses, hogs, dogs and other domestic animals.

It will protect cows from flies and mosquitoes and prevent the loss in yield of milk which always occurs during the fly season.

It will destroy their eggs.
It will not gum the hair or make it brittle.
It will not irritate the skin.
It can be used at milking time and will not taint the milk.
It will protect horses from flies if applied before a drive, or before turning out to pasture. Gallon can, $\$ 1.35$. Not mailable.
GAPE REMEDY-Don't try to extract gapes with a wire or feather when you can get such an effective remedy as Conkey offers. This remedy comprises two powders-both in same box for one price-one sifted over chicks causes them to dislodge the worms in windpipe by coughing, the other is a tonic powder which is mixed in the feed to help the bird build up its resisting powers. Pkgs., 25c.
 and 50 c .; 30c. and 55 c .


HEAD LICE OINTMENT-Kill the head lice or the head lice will kill your baby chicks. Even if by chance the chicks survive, they are sure to be left in a weakened condition, a prey to many other diseases.
Pratts Head-Lice Ointment kills the head lice instantly. It soothes, heals, is safe to use on all parasitic diseases. Tins, 35c.
HORSE COMFORT-We recommend Horse Comfort for all Flesh Wounds, Wire Cuts, Galls and Sores of long standing, for Blood Poison, Proud Flesh, Scratches, Mud Fever, for Snag Wounds, Sore Shoulders, Grease Heel, Malignant Ulcers, Fistula, Poll Evil, Corns in Horses, etc. We claim that Horse Comfort has won the right to the name-"The World's Greatest Healer." Small bottle, in pkg., 35c. Not mailable.
KOW KARE, the Great Cow Medicine-We recommend Kow Kare for Scouring, Lost Appetite, Bunches or Red Water; especially for possible or threatened Abortion, for Barrenness, for Retained Afterbirth, for Milk Fever. Hundreds of users testify that it helps increase the flow of milk from 10 to 20 per cent. It is a remedy made only for cows. Costs a cent a day per cow. Small size, per can, $11 / 2 \mathrm{lbs} ., 65 \mathrm{c}$.; large size, per can, $31 / 4 \mathrm{lbs}$., $\$ 1.25$, postpaid.

LICE KILLER (Powdered)—Get rid of lice on your poultry, in nests, dust-baths, incubators and elsewhere in a day's time by using Pratts Lice Killer.

Effective, non-poisonous, non-irritating. May be used wherever a powder is suitable. A splendid deodorizer.

It quickly and thoroughly kills all lice on little chicks, big chicks, setting hens and incubator chicks. It rids horses, cattle, hogs, dogs and cats of lice and destroys ticks on sheep. It destroys insects and bugs on vines, plants and flowers. A valuable deodorizer and disinfectant for all poultry houses, barns, stables and dwellings. Drives out moths from closets, furniture, carpets and clothing. Pkgs., 1 1b., 25c.; $21 / 2$ lbs. 50 c .


LICE KILLER POWDER (Drs. Hess \& Clark)-Nonpoisonous and non-explosive. Being stronger, has greater disinfecting qualities than similar preparations. Quickly and thoroughly kills lice on ducks and chickens. Rids
 horses, cattle, hogs, dogs and cats of lice. Destroys ticks on sheep, insects and bugs infesting shrubbery, vines and plants. Drives out moths and bugs from furniture, closets, carpets and clothing. Pkgs., 1 lb., 25c.; $21 / 2$ lbs., 50c.

LIMBERNECK REMEDY-For limberneck (or ptomaine poisoning) this remedy should be on hand in your Conkey Corner at all times as Limberneck must be treated promptly. Pkg., 50c.

POULTRY REGULATOR-Healthy birds and lots of eggs, the two big things in poultry raising, are made certain by giving Pratts Poultry Regulator.
It builds up vitality, insures sound digestion, sharpens appetite and prevents disease, thus putting birds in condition for heavy egg laying or winning blue ribbons.


Pratts is the original Poultry Regulator of America and is in use by the most successful poultry raisers everywhere.

When regularly used, hens lay throughout the year.

It will prevent chicken cholera, gapes, roup, rheumatism, expel worms, prevent leg weakness, and egg eating. It will greatly improve turkeys, geese, ducks, pigeons and guineas-insuring quick growth and keeping them free from disease. $11 / 2$-1b. pkg., 25 c .; 4 lbs., 50 c .; $12 \mathrm{lbs} ., \$ 1.40$; 25-1b. bag, $\$ 2.70$.

PANAGEA (Hess \& Clark)-This is not a stimulant, but a digestive tonic, which produces eggs in nature's way. PANACEA fed in winter will wonderfully increase the egg production. It is fed with other foods, and enables the system to appropriate egg-making material from the feed fed. Pkgs., $11 / 2 \mathrm{lbs} ., \mathbf{2 5 c}$.; $5 \mathbf{1 b s} ., \mathbf{7 5 c}$; ; 12 lbs., $\$ 1.50$.

## POULTRY DISINFECTANT AND LIQUID

 LICE KILLER-If poultry owners would regularly spray the chicken houses, roosts, dropping boards and utensils with Pratts Poultry Disinfectant, most all their troubles would vanish. This great Disinfectant is a real wonder- worker in the poultry yard. Put up in 1 qt., 55 c .; 2 qts., 95 c .; 1 gal., $\$ 1.60$. Not mailable.


RED MITE SPEGIAL-Get rid of red mites-those destructive pests that weaken a fowl by sucking its blood-thus making it an easy prey to disease, by using Pratts Red Mite Special.

Spray perches, dropping boards, sides of house and roof near perches, and powder the birds with Pratts Powdered Lice Killer. This combination treatment will protect your flock from these profit-destroying pests. Qt., 55c.; 2 qts., 90c.; gal., \$1.35. Not mailable.
POULTRY WORM REMEDY-This prescription rids birds of many troublesome worms, thus promoting a return to healthy conditions. Give it as soon as you suspect worms-it will help the whole flock. Pkgs., 30c. and 50c.

ROUP POWDER-Don't let ROUP cut your profits. The sure and easy "ounce of prevention" against this dangerously contagious disease is Pratts Roup Powder.

Quickly absorbed by the blood, purifies the system, reduces fever, allays inflammation. The safe remedy for roup, colds, catarrh, and all bad weather diseases. Tablets or powder. Pkgs., 25c. and 50c.


ROUP REMEDY - When Roup breaks out there's no time to experiment-start treatment at once-the disease is very contagious. Cold, rainy weather and changeable conditions intensify Roup. When birds sneeze, froth in eyes, or run at nose put Conkey's Roup Remedy in the drinking water. Sick birds doctor themselves and others are protected from catching the disease. Better still, always at the first sign of "roupy weather," place Conkey's Roup Remedy in fountains-it's a great preventative. Pkgs., 30c., 60c., $\$ 1.20$; ( $11 / 2-1 \mathrm{~b}$. can) $\$ 2.50$, postpaid.

CONKEY'S ROUP PILLS-For treating individual cases and for use at shows when birds develop colds. These pills have saved many a valuable bird. Pkgs., 30c., 60c., \$1.20.

SCALY LEG OINTMENT-Scaly leg is an annoying disease, impairing vitality and speedily ruining the appearance of affected birds. Pratts Scaly-Leg Ointment usually affords relief in a few days. It kills the parasites which cause the trouble and promotes a
 to take the place of the diseased parts. Pkgs., 35 c . and 70 c .

SORE HEAD, CHICKEN POX PREPARA-TION-From gratifying experience poultrymen have learned that the disgusting disease known as Sore-Head or Chicken-Pox can be successfully treated with Pratts Sore-Head and ChickenPox Preparation. It acts quickly, checking the spread of the contagion and healing the sores. We guarantee Pratts Sore-Head (Chicken-Pox) Preparation. Pkgs., 35c.and 70c.
WATER GLASS (Liquid) -Put up expressly for packing away eggs, when they are plentiful and cheap. With this preparation you can pack them away, and have a supply of fresh eggs all winter. One gallon of this solution is sufficent to mix with enough water to pack away fifty dozen eggs. Use 1 part Water Glass to 9 parts water. Pt., 25c.; qt., 40c.; 1/2 gal., 70c.; gal., $\$ 1.15$. Not mailable.

WATER GLASS (Powder form)The package contains sufficient material to keep about 15 dozen eggs in a five
 gallon crock. Pkg., 25c.

CONKEY'S WHITE DIARRHEA REMEDY-


Once you have used this old reliable preparation, you will never be without it. As a preventive of bowel troubles, White Diarrhea and other digestive complaints, it has given great satisfaction for many years. Once started diarrhetic conditions often sweep away the whole hatch-hundreds of chicks. Play safe-keep this remedy in the drinking water until the danger period is past. This remedy is also recommended as a preventive measure and for treatment of coccidiosis. Pkgs., 30c., 60 c ., $\$ 1.20$.

## WHITE DIARRHEA TABLETS-Toprotect


your chicks from white diarrhea, the most destructive of all chick diseases, it is only necessary to give Pratts White Diarriea Tablets in the drinking water from the first drink. This remedy has saved many dollars' worth of chicks for poultry raisers. You can depend on it. Pkgs., 25c., 50c. and \$1.00.

## FARM SEEDS



GRASS AND CLOVER SEEDS

| Alfalfa | Clover, Red. |
| :---: | :---: |
| Als | 4 Clover, Wh |
| Canadian Blue Grass. | 7 Creeping Bent |
| Clover, Crim | 4 Emhankment |
| Clover, Mammoth R | English Ry |


| 4 | Fine Leaved Fescue. . |
| :--- | :--- |
| -8 | Golf Grass.............. |
| 7 | Hard Fescue........ |
| 8 | Italian Rye Grass..... |
| 7 | Kentucky Blue Grass. |


| 7 | Lawn Grass. . . . . . . |
| :--- | :--- |
| 8 | Meadow Fescue. . |
| 7 | Orchard Grass. . . |
| 7 | Pasture Mixtures . |
| 7 | Red Fescue. . . . . . . |


| 8 | Rhode Island | Bent |
| :---: | :---: | :---: |
| 7 | Grass. |  |
| 7 | Red Top |  |
| 8 | Rye Grass |  |
| 7 | Shade Lawn | Ss. . |



## VEGETABLE AND HERB SEEDS

| Anise.. . . . . . . . . . . . . 34 | Cauliflower...... . . . . 16 |
| :---: | :---: |
| Artichoke........... 9 | Celeriac. . . . . . . . . . 18 |
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6
8
8 Cucumber . . . . . . . . . . .

| 21 | Lettuce |
| :---: | :---: |
| 21 | Mushroom |
| 34 | Muskmelon. |
| 21 | Mustard |
| 22 | Okra. |
| 32 | Onion |
| 22 | Onion Sets |
| 34 | Parsley |
| 22 | Parsnip |
| 22 | Peas |
| 34 | Pennyroy |
| 22 | Pepper |


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| 23 | Potatoes........... . . 28 | Sweet Marjoram. |
| :---: | :---: | :---: |
| 25 | Pumpkin. . . . . . . . . . 29 | Swiss Chard..... |
| 24 | Radish . . . . . . . . 29-30 | Thyme. |
| 25 | Rhuharb Root . . . . . . . 30 | Tobacco |
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[^0]:    For a Rich Velvety Lawn, Sow Mingle's Finest Velvet Lawn Seed-Experience Has Proven That Mingle's Shaded Lawn Grass Meets All Requirements

[^1]:    Musselburgh. Foliage fan-shaped and strong in growth. Large in size and leaves broad. A fine market variety. Pkt., 10c.; oz., 20c.; $1 / 4$ 1b., 60c.; 1b., $\$ 2.00$.

[^2]:    Strawberries-Early and late varieties.
    Blackberries-In strong plants, rust-proof.
    Gooseberries-All varieties, in one and two-year plants.
    Currants-Many varieties, including Boskoop Black Giant.

[^3]:    - 

